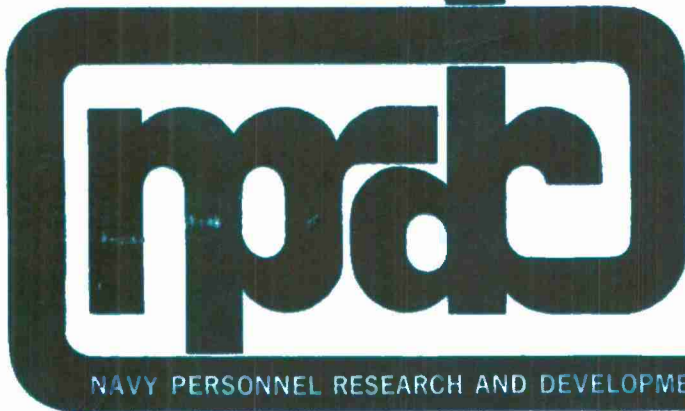


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MARCH 1974

**APPRENTICESHIP PERSONNEL SHIPBOARD WORK EVALUATION:
STATISTICAL ANALYSIS,**

**Hulett C. McDowell
Paul A. Magnusson**

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APPRENTICESHIP PERSONNEL SHIPBOARD WORK
EVALUATION: STATISTICAL ANALYSIS

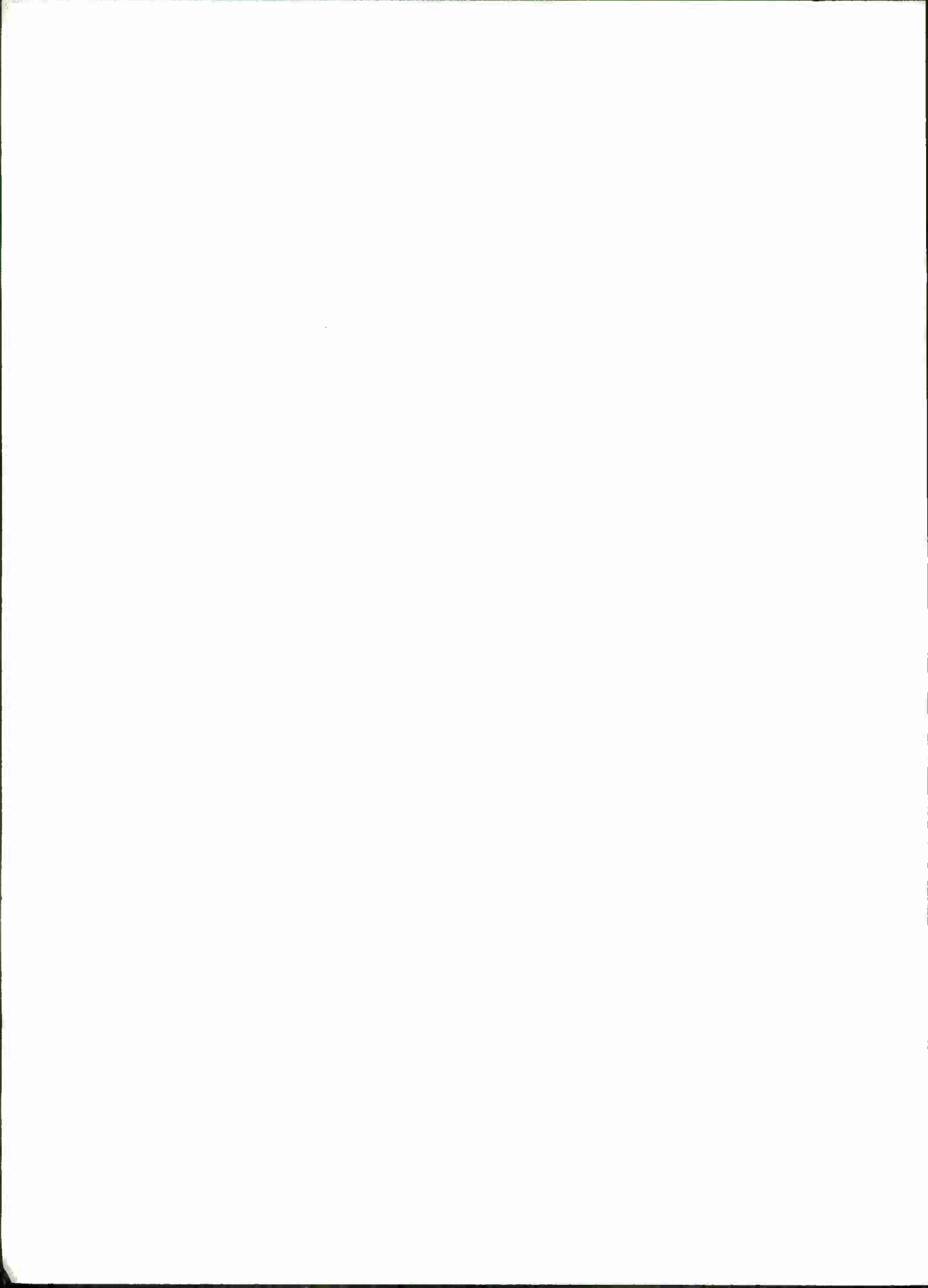
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| Job description index | Effective Task Inventory Packaging | | | | | | | | | | | |
| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number) | | | | | | | | | | | | |
| <p>The total Navy effort in the development of new/improved methods and techniques for the determination of qualitative Navy Manpower requirements must keep pace with expanding needs for occupational data. Specifically, this research effort required designing of multipurpose data gathering tools and conducting a survey for non-rated Navy personnel to determine accurate job requirements.</p> <p>Collected data were analyzed and displayed as computer printouts. These printouts and their description have been distributed to users concerned with</p> | | | | | | | | | | | | |

20. ABSTRACT (continued)

recruit training curriculum revision, training course requirements, common core development, personnel qualification standards, personnel qualifications for advancement revisions, and naval occupational task program data bank updating. This research report describes statistical methodology used in determining sample size. It also includes sections on research tool and technique design, ship types and numbers surveyed, data collecting methodology, and data reduction and presentation.

SUMMARY

Problem

Efforts toward the development of new/improved methods and techniques for the determination of qualitative Navy manpower requirements must be adequate to keep pace with expanding needs for occupational data use in: (1) Justification of qualitative manpower requirements to higher authority, and (2) performance of a variety of naval personnel administration and training functions.

This research effort entails the experimental verification of some existing techniques and design, and testing of modifications of existing techniques. Since CNO (see Appendix A) has set forth a requirement for information on duties and tasks of non-rated personnel, these techniques were used in the conducting of a survey to determine accurate job requirements for non-rated personnel.

Purpose

The primary purpose of this research effort was to try out job analysis tools and techniques which could be used in support of the above identified personnel functions. A secondary purpose was to demonstrate the feasibility of these techniques for determining the actual work being performed by the Seaman (SN), Fireman (FN), and Constructionman (CN) Apprenticeships.

The CN portion of this research effort is being conducted by Civil Engineering Support Office (CESO) personnel of the Naval Construction Battalion Center, Port Hueneme, California, with support from this Center.

Approach

The Seaman (SN) and Fireman (FN) Apprenticeship Work Requirements Survey Booklets were developed and used as a questionnaire to obtain occupational information. Most of this development was done by senior petty officers from this Center using such source documents as: (1) Recruit Training Curriculum; (2) Qualifications for Advancement Manual; (3) Naval Training Course Manuals; (4) Safety Manuals, and (5) Personnel Qualifications Standards (PQS). Final review of the Questionnaire was by the Staffs of Service School Command, and Development and Training Command, San Diego, California, and by Third and Second Class Petty Officers assigned to sea duty.

The SN Apprenticeship Work Requirements Survey Booklet contained items for non-rated personnel from the following 18 ratings: BM, CS, DK, DP, ET, FT, GM, OS, PN, QM, RM, SD, SH, SK, SM, ST, TM, and YN. The FN Apprenticeship Work Requirements Survey Booklet contained items for non-rated personnel from the following seven ratings: EM, IC, BT, MM, EN, HT, and MR. The Survey Booklet for each rating

was composed of five parts with both general and special instruction included. Part A consisted of instruction for recording personal data. Part B was composed of a listing of common and specific tasks associated with each rating. Part C was composed of a listing of common and specific knowledge items associated with each rating. Part D was a list of equipment, tools, and publications common to each rating. Part E was a miscellaneous composition of work hazards, worker characteristics required for the job, watch standing duties, and personal opinions of job factors. A separate response packet called a Job Description Index accompanied each SN and FN booklet providing spaces for answering questions from the booklets. Appendix B is the complete set of SN Apprenticeship sections packaged as a booklet in the manner administered and Appendix C is a sample of the response packet used by both SN and FN Apprenticeships.

SN and FN Apprenticeship Work Requirements Survey Booklets were administered and collected by teams trained and experienced in data gathering. Data collection started 3 April 1973 and ended 13 July 1973. Data collected the week of 2 April 1973 were used for pretesting the Questionnaire and response packet. Only minor changes resulted from the pretest.

Twenty-two ship types assigned to the Pacific and Atlantic Fleets were visited by the data gathering teams (see Table 1). A total of 3,042 questionnaires were processed from a population of 59,712 non-rated personnel assigned to sea duty (see Table 2). This sample size was selected to give a confidence level of .95.

To date, data gathering has been completed for SN and FN Apprenticeships, and computer printouts (Figures 1-7) have been described and distributed to users. This research report augments these printouts by fully describing the statistical methods used.

Findings

The methods employed in the data gathering for this project are effective in obtaining useful information for: compilation and packaging of task inventories; using teams trained in task gathering; determining statistical sampling procedures; maintaining close coordination with concerned shipboard command personnel, and for developing common task knowledge and tool inventories. These methods are presented in the recommendations below.

Recommendations

Recommendations are presented in two parts corresponding to the two objectives of this research effort: (1) to develop job analysis tools and techniques to improve data gathering, and (2) to employ these tools and techniques to gather task data to determine actual work being performed by SN and FN Apprenticeships.

Recommendations for the first objective are as follows:

1. Use job experts (senior enlisted personnel) for the compilation of effective task inventories. (Page 5)
2. Design and package occupational data gathering instruments so that several rates/ratings may be sampled simultaneously. (Page 5)
3. Use trained teams that personally administer questionnaires to increase accuracy. (Page 9)
4. Determine sample sizes statistically so that the obtained data will represent the population data to a sufficiently precise degree. (Page 2)
5. Maintain close coordination between project personnel and shipboard command personnel when conducting shipboard surveys in order to ensure a proper environment for administering questionnaires. (Page 6)

Recommendations for the second objective of this research effort are to use the data gathered as follows: to determine training course requirements; to update the recruit training curriculum; to augment Naval Occupational Task Analysis Program (NOTAP) data bank; to update Personnel Qualification Standards (PQS), and to update qualifications for advancement.

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APPRENTICESHIP PERSONNEL SHIPBOARD WORK
EVALUATION: STATISTICAL ANALYSIS

INTRODUCTION

Problem

Efforts toward the development of new/improved methods and techniques for the determination of qualitative Navy manpower requirements must be adequate to keep pace with expanding needs for occupational data use in: (1) Justification of qualitative manpower requirements to higher authority, and (2) performance of a variety of naval personnel administration and training functions.

This research effort entails the experimental verification of some existing techniques and design, and testing of modifications of existing techniques. Since CNO (see Appendix A) has set forth a requirement for information on duties and tasks of non-rated personnel, these techniques were used in the conducting of a survey to determine accurate job requirements for non-rated personnel.

Purpose

The primary purpose of this research effort was to try out job analysis tools and techniques which could be used in support of the above identified personnel functions. A secondary purpose was to demonstrate the feasibility of these techniques for determining the actual work being performed by the SN, FN, and CN Apprenticeships.

The CN portion of this research effort is being conducted by Civil Engineering Support Office (CESO) personnel of the Naval Construction Battalion Center, Port Hueneme, California, with support from this Center.

Background

Presently there is no research-supported definition of what tasks and duties the newly graduated recruit is to perform. Therefore, the qualifications for advancement, and the training objectives, historically have been based on what was generally thought to be fleet requirements rather than on what has been soundly determined. Also, the current Rating structure provides that a seaman is a seaman, even though the seaman may be striking for any one of a number of ratings. From the qualifications standpoint and from the advancement standpoint, requirements for the seaman are all the same. This is also true for the Fireman and Constructionman Apprenticeships.

Aware that one of the most effective methods of solving these problems is to develop methodology to identify actual work being performed aboard ships, the Bureau of Naval Personnel

directed this Center to proceed in determining actual work requirements with Chief of Naval Operations (OP-991C) and Chief of Naval Education and Training (Code N-33) in the sponsorship of the research effort (see Appendix A).

APPROACH

Sampling Procedures

Most of the ships surveyed (Table 1) were selected from West Coast Commands in order to minimize traveling costs. The assumption was made that the basic work performed by each Apprenticeship was similar from Coast to Coast.

Since the population size largely determines the sample size required for sample data to be representative of population data at stated levels of confidence, close attention was devoted to defining the population. E-1/E-2 and E-3 personnel from both SN and FN Apprenticeships were defined as populations (Table 2). The confidence level was selected to be .95 so that there was 95 percent confidence that the expected difference between the population and sample percentage was less than five percent according to the following formula:¹

$$n = \frac{\frac{t^2_{PQ}}{d^2}}{1 + \frac{1}{N} \left\{ \frac{t^2_{PQ}}{d^2} - 1 \right\}} .$$

The estimated sample size is simplified to $n_o = \frac{t^2_{PQ}}{d^2}$, and the

sample size is simplified to $n = \frac{n_o}{1 + (n_o - 1)/N}$, where:

¹Cochran, W. G. Sampling techniques. (2nd ed.) New York: John Wiley & Sons, Inc., 1963.

TABLE 1
Ship Types Sampled

| Ship types sampled | No. of ships ^a in types sampled | No./% ships sampled (Total) | No./% ships sampled (West Coast) | No./% ships sampled (East Coast) |
|--|--|-----------------------------|----------------------------------|----------------------------------|
| AD - Destroyer Tender | 11 | 3 (27.3%) | 2 (18.2%) | 1 (09.1%) |
| AE - Ammunition Ship | 16 | 3 (18.7%) | 3 (18.7%) | None |
| AF - Store Ship | 04 | 1 (25.0%) | None | 1 (25.0%) |
| AFS - Combat Store Ship | 07 | 1 (14.3%) | 1 (14.3%) | None |
| AH - Hospital Ship | 01 | 1 (100.0%) | 1 (100.0%) | None |
| AO - Oiler | 23 | 4 (17.4%) | 3 (13.0%) | 1 (04.3%) |
| AOR - Replenishment Oiler | 05 | 2 (40.0%) | 1 (20.0%) | 1 (20.0%) |
| AS - Submarine Tender | 11 | 2 (18.2%) | 2 (18.2%) | None |
| ATF - Fleet Ocean Tug | 23 | 6 (26.0%) | 6 (26.0%) | None |
| CVA - Attack Aircraft Carrier | 11 | 1 (09.0%) | None | 1 (09.0%) |
| CVAN - Attack Aircraft Carrier (Nuc. Prop) | 01 | 1 (100.0%) | 1 (100.0%) | None |
| DD - Destroyer | 106 | 8 (07.5%) | 5 (04.7%) | 3 (02.8%) |
| DDG - Guided Missile Destroyer | 29 | 4 (13.8%) | 4 (13.8%) | None |
| DE - Escort Ship | 60 | 8 (13.3%) | 8 (13.3%) | None |
| DEG - Guided Missile Escort Ship | 06 | 1 (16.6%) | 1 (16.6%) | None |
| DLG - Guided Missile Frigate | 26 | 3 (11.5%) | 3 (11.5%) | None |
| DLGN - Guided Missile Frigate (Nuc. Prop) | 02 | 2 (100.0%) | 2 (100.0%) | None |
| LKA - Amphibious Cargo Ship | 06 | 1 (16.6%) | 1 (16.6%) | None |
| LPA - Amphibious Transport | 02 | 1 (50.0%) | 1 (50.0%) | None |
| LPH - Amphibious Assault Ship | 07 | 1 (14.3%) | 1 (14.3%) | None |
| LSD - Dock Landing Ship | 13 | 3 (23.0%) | 3 (23.0%) | None |
| LST - Tank Landing Ship | 24 | 4 (16.7%) | 4 (16.7%) | None |
| TOTAL | 394 | 61 (15.5%) | 53 (13.5%) | 8 (02.0%) |

^aOPNAV P09B3 - 107 Edition 105, 1 March 1973, Standard Navy Distribution List, Part 1.

TABLE 2

Sampling Data for Non-rated Personnel
Assigned to Sea Duty

| Rate | Sample size | Population size ^a | Percent sampled |
|-------------|-------------|------------------------------|-----------------|
| SR/SA | 877 | 24,849 | 3.5 |
| SN | <u>974</u> | <u>15,413</u> | <u>6.3</u> |
| TOTAL | 1,851 | 40,262 | 4.6 |
| - - - - - | | | |
| FR/FA | 626 | 12,832 | 4.9 |
| FN | <u>565</u> | <u>6,618</u> | <u>8.5</u> |
| TOTAL | 1,191 | 19,450 | 6.1 |
| GRAND TOTAL | 3,042 | 59,712 | |

^aBUPERS R51813B dated 28 February 1973
(Code 36112).

n = Sample size,

N = Population size,

n_o = Estimated sample size (approximate n if $\frac{n_o}{N}$ is negligible),

t = Abscissa of the normal curve that cuts off an area α at the tails,

α = Significance level (risk),

P = Population proportion saying Yes (set at .5 for worst case for this project),

Q = $1-P$ (population proportion saying No),

d^2 = Margin of error analyst is willing to accept in estimating proportion between population (true) and observed (sample).

Construction of Data Gathering Tools

Of the 31 ratings to which SN Apprenticeship personnel progress, and the nine to which FN progress, 18 SN and seven FN ratings were selected for sampling as follows: for SN Apprenticeship BM, CS, DK, DP, ET, FT, GM, OS, PN, QM, RM, SD, SH, SK, SM, ST, TM, and YN; for FN Apprenticeship EM, IC, BT, MM, EN, HT, and MR. The remaining ratings were considered to contain too few non-rated personnel to be sampled.

The Work Requirements Survey booklets (Appendix B) which contain the Task Inventories were developed by job experts (senior petty officers) using such source documents as: (1) Recruit Training Curricula, (2) Qualifications for Advancement Manual, (3) Naval Training Course Manuals, (4) Safety Manuals, and (5) Personnel Qualification Standards (PQS). When the Task Inventory was completed by the job experts, third and second class petty officers assigned to sea duty were invited to review areas found in their rates and to make recommendations for changes. Finally, the Staffs of Service School Command, San Diego and Development and Training Command, San Diego, reviewed the Work Requirements Survey booklets.

To facilitate data gathering, all 18 SN sections were packaged together, as were the seven FNs. The packages were designed to be reusable, resulting in considerable savings (see Appendix B for SN booklet). Each Work Requirements Survey booklet was packaged to contain common and specific rate parts.

Each Work Requirements Survey booklet is composed of five parts, with both general and special instructions included. Part A consists of instructions for recording personal data. Part B is composed of a listing of tasks associated with each rate. Part C is composed of a listing of knowledge items associated with each rate. Part D is a list of equipment, tools, and publications common to each Apprenticeship group. Part E is a miscellaneous section composed of a list of work hazards, worker characteristics required for job, watches normally performed, and a list of job factors.

A separate response packet (Job Description Index), Appendix C, accompanies the Work Requirements Survey booklet, providing spaces for responses to task items and additional comments. The response packet was designed to be compatible for all the Apprenticeship personnel.

Data reduction was designed for optical scanning processing to increase speed and reduce errors such as those induced by keypunching. The optically scanned data were then written on magnetic tape.

Computer programs were developed to obtain computer printout format giving frequency and percentage of responses. These computer printouts and their descriptions have been distributed to the following users: Chief of Naval Operations (OP-991C); Chief of Naval Training (Code N-33); Chief of Naval Technical Training (Codes N-445, 0161, N-331); Commanding Officer, Service School Command, San Diego (Code 3450); Director, Occupational Standards Department, and Director, Navy Occupational Task Analysis Program (NOTAP).

Since the sample of the SN and FN Apprenticeships was representative of the total population assigned to ships (Table 2), response percentages applicable to the survey population can be applied to the Navy-wide population of SN and FN Apprenticeship sea billets. Tables 3 and 4 show number of personnel responding by rate for each ship type sampled.

Collection of Data

Before collection of data could start, communications between this Center and concerned Fleet Activities had to be established. First, the fleet type commanders were contacted and briefed on the project. This included explaining the objectives of the research and its impact on the Navy. Then the type commanders were asked to send speedletters to available ships under their commands, explaining the research effort and asking for their cooperation. Attention was brought to the concerned commanding officers that Center project personnel would contact the ships and set up specific dates and times for the survey. The survey was on a not-to-interfere basis.

After the speedletters were received by the ship commanding officers, Center project personnel visited each ship and discussed the details with the ship's executive officer. Exact numbers of required personnel needed were discussed, as were the time and place of the survey. Every effort was made to conduct the survey at a time when: (1) the ship's operating schedule was minimal; (2) there were no inspections in progress; (3) no change of command ceremonies were in progress; (4) ship was not preparing for deployment; (5) ship was not in maintenance and upkeep condition due to extended sea tours; (6) ship was not in extended overhaul or repair status, and (7) when prospective respondents were not in liberty status.

Next, security clearances of the survey team members were mailed to all ships concerned. Then the administering of the questionnaires was started by teams trained and experienced in data gathering. At least one team member was a senior Personnelman who extracted personnel information from the official service records of the respondents. The team method of personally conducting the survey was used for the following reasons:

TABLE 3

Number of Non-rated Personnel Sampled by
Rating for Each Ship Type
(SN Apprenticeship)

| Rating/ Pay Grade | Ship Type | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-----------|-----|----|-----|----|-----|-----|----|-----|-----|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-------|
| | AD | AE | AF | AFS | AH | AO | AOR | AS | ATF | CVA | CVAN | OO | DDG | DE | DEG | DLG | DLGN | LKA | LPA | LPH | LSO | LST | TOTAL |
| <u>BM</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 87 | 32 | 17 | 16 | 8 | 47 | 11 | 7 | 17 | 2 | 11 | 50 | 20 | 57 | 0 | 27 | 5 | 0 | 11 | 0 | 27 | 64 | 516 |
| E3 | 27 | 16 | 5 | 3 | 2 | 28 | 1 | 1 | 13 | 2 | 21 | 12 | 6 | 35 | 0 | 11 | 15 | 0 | 8 | 0 | 7 | 32 | 245 |
| <u>CS</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 3 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 7 | 1 | 0 | 2 | 0 | 0 | 6 | 29 |
| E3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 3 | 4 | 1 | 2 | 0 | 1 | 4 | 0 | 0 | 0 | 1 | 5 | 27 |
| <u>OK</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 8 |
| E3 | 2 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 3 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 14 |
| <u>OP</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| E3 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| <u>ET</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| E3 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 4 | 4 | 2 | 1 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 4 | 3 | 37 |
| <u>FT</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 8 |
| E3 | 1 | 6 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 2 | 1 | 2 | 1 | 5 | 1 | 3 | 3 | 1 | 0 | 1 | 1 | 3 | 34 |
| <u>GM</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 1 | 11 | 1 | 1 | 0 | 1 | 2 | 0 | 2 | 1 | 4 | 10 | 2 | 5 | 1 | 7 | 4 | 0 | 0 | 0 | 1 | 2 | 56 |
| E3 | 4 | 13 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 8 | 1 | 12 | 5 | 8 | 1 | 4 | 2 | 2 | 3 | 0 | 2 | 3 | 72 |
| <u>CS</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 1 | 3 | 0 | 2 | 1 | 2 | 3 | 0 | 0 | 3 | 7 | 10 | 1 | 2 | 0 | 5 | 0 | 0 | 1 | 0 | 3 | 4 | 48 |
| E3 | 0 | 3 | 2 | 0 | 1 | 4 | 0 | 0 | 1 | 7 | 1 | 4 | 6 | 8 | 0 | 5 | 8 | 0 | 1 | 0 | 4 | 2 | 57 |
| <u>PN</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| E3 | 7 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 5 | 3 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| <u>QM</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 4 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 17 |
| E3 | 1 | 4 | 0 | 2 | 0 | 5 | 3 | 0 | 5 | 5 | 1 | 4 | 2 | 7 | 0 | 3 | 3 | 0 | 2 | 0 | 2 | 3 | 52 |
| <u>RM</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 1 | 2 | 5 | 2 | 2 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 3 | 2 | 2 | 29 |
| E3 | 3 | 5 | 1 | 1 | 1 | 2 | 1 | 4 | 2 | 12 | 7 | 7 | 2 | 15 | 2 | 6 | 1 | 0 | 2 | 1 | 4 | 4 | 83 |
| <u>SD</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 1 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 4 | 2 | 1 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 19 |
| E3 | 10 | 5 | 0 | 1 | 6 | 0 | 3 | 1 | 2 | 20 | 19 | 1 | 1 | 3 | 0 | 0 | 1 | 0 | 3 | 0 | 1 | 5 | 82 |
| <u>SH</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 7 | 0 | 0 | 1 | 5 | 2 | 0 | 2 | 0 | 1 | 0 | 4 | 1 | 3 | 3 | 0 | 1 | 0 | 2 | 0 | 0 | 3 | 35 |
| E3 | 4 | 5 | 1 | 1 | 4 | 2 | 2 | 4 | 1 | 1 | 0 | 3 | 1 | 5 | 2 | 2 | 7 | 3 | 1 | 0 | 3 | 10 | 62 |
| <u>SK</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 10 | 2 | 1 | 1 | 0 | 5 | 1 | 6 | 1 | 2 | 1 | 1 | 5 | 1 | 0 | 0 | 1 | 1 | 2 | 0 | 2 | 2 | 45 |
| E3 | 9 | 2 | 2 | 2 | 0 | 4 | 1 | 4 | 1 | 5 | 2 | 3 | 4 | 5 | 0 | 1 | 1 | 2 | 3 | 0 | 1 | 4 | 56 |
| <u>SM</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 2 | 11 |
| E3 | 1 | 3 | 0 | 0 | 0 | 2 | 3 | 1 | 1 | 2 | 1 | 7 | 2 | 3 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 5 | 37 |
| <u>ST</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 9 |
| E3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 2 | 8 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 19 |
| <u>TM</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| E3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| <u>YN</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 3 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 2 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 19 |
| E3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 0 | 8 | 3 | 4 | 3 | 5 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 3 | 45 |
| TOTAL | 214 | 118 | 32 | 38 | 37 | 129 | 38 | 55 | 55 | 108 | 97 | 169 | 73 | 197 | 17 | 97 | 67 | 14 | 42 | 10 | 72 | 172 | 1851 |

TABLE 4

Number of Non-rated Personnel Sampled by
Rating for Each Ship Type
(FN Apprenticeship)

| Rating/ Pay Grade | Ship Type | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-----------|----|----|-----|----|----|-----|----|-----|-----|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-------|
| | AD | AE | AF | AFS | AH | AO | AOR | AS | ATF | CVA | CVAN | DD | DDG | DE | DEG | DLG | DLGN | LKA | LPA | LFH | ISD | LST | TOTAL |
| <u>BT</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 13 | 14 | 0 | 6 | 3 | 12 | 3 | 5 | 1 | 1 | 0 | 36 | 14 | 23 | 2 | 19 | 0 | 4 | 2 | 0 | 13 | 2 | 173 |
| E3 | 7 | 2 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 22 | 0 | 15 | 13 | 18 | 3 | 11 | 0 | 1 | 1 | 0 | 2 | 1 | 100 |
| <u>EM</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 10 | 4 | 2 | 1 | 1 | 3 | 1 | 4 | 2 | 2 | 3 | 7 | 0 | 3 | 1 | 2 | 2 | 0 | 1 | 0 | 5 | 10 | 64 |
| E3 | 13 | 3 | 2 | 2 | 6 | 6 | 1 | 5 | 8 | 3 | 1 | 5 | 0 | 4 | 0 | 2 | 0 | 1 | 3 | 0 | 2 | 6 | 73 |
| <u>EN</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 7 | 2 | 0 | 2 | 1 | 2 | 2 | 5 | 12 | 5 | 0 | 5 | 1 | 7 | 0 | 2 | 2 | 2 | 0 | 0 | 9 | 37 | 103 |
| E3 | 3 | 2 | 0 | 1 | 0 | 6 | 1 | 7 | 5 | 1 | 0 | 3 | 2 | 1 | 2 | 2 | 1 | 0 | 4 | 0 | 3 | 21 | 65 |
| <u>HT</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 19 | 5 | 1 | 2 | 2 | 3 | 2 | 7 | 3 | 2 | 9 | 10 | 0 | 7 | 2 | 4 | 3 | 0 | 3 | 0 | 9 | 8 | 101 |
| E3 | 30 | 4 | 2 | 1 | 5 | 5 | 0 | 14 | 2 | 13 | 4 | 4 | 3 | 7 | 3 | 1 | 2 | 0 | 2 | 0 | 3 | 4 | 109 |
| <u>IC</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 3 | 0 | 0 | 1 | 0 | 2 | 0 | 7 | 0 | 1 | 1 | 7 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 29 |
| E3 | 4 | 2 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 2 | 6 | 3 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 29 |
| <u>MM</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 25 | 0 | 1 | 5 | 1 | 11 | 1 | 5 | 0 | 3 | 2 | 24 | 13 | 15 | 0 | 10 | 4 | 4 | 2 | 0 | 16 | 1 | 143 |
| E3 | 19 | 16 | 1 | 1 | 7 | 13 | 4 | 1 | 0 | 18 | 3 | 18 | 9 | 24 | 3 | 15 | 4 | 1 | 2 | 0 | 9 | 0 | 168 |
| <u>MR</u> | | | | | | | | | | | | | | | | | | | | | | | |
| E1/E2 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 13 |
| E3 | 13 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 21 |
| TOTAL | 171 | 56 | 9 | 23 | 27 | 67 | 19 | 65 | 33 | 75 | 29 | 140 | 57 | 113 | 16 | 69 | 19 | 14 | 20 | 0 | 75 | 94 | 1191 |

a. To ensure motivation of respondees by stressing the importance of the research effort.

b. To answer any pertinent question concerning the survey.

c. To ensure that all materials needed were available.

d. To correct most errors on sight.

e. To ensure standardization in conducting the survey.

f. To ensure optimum time and place for conducting the survey.

g. To ensure that all completed questionnaires were returned.

h. To ensure that accurate personal data were extracted from official service records.

Data collection started 3 April 1973 and ended 13 July 1973. Data collected the week of 2 April 1973 were used for pretesting the questionnaire and response packet. Only minor changes resulted from this pretest and data collection was resumed the week of 9 April 1973.

Twenty-two ship types assigned to the Pacific and Atlantic Fleets were visited by the data gathering teams (see Tables 3 and 4, pp. 7-8). A total of 3,042 questionnaires were processed from a population of 59,712 non-rated personnel assigned to sea duty (see Table 2, p. 4). Ship types with the total number of non-rated personnel surveyed are listed as follows (see Tables 3 and 4): AD-385, AE-174, AF-41, AFS-61, AH-64, AO-196, AOR-57, AS-120, ATF-88, CVA-183, CVAN-126, DD-309, DDG-120, DE-310, DEG-33, DLG-166, DLGN-86, LKA-28, LPA-62, LPH-10, LSD-147, and LST-266. Of these, 464 personnel assigned to seven ship types in the Atlantic Fleet were included in the survey.

DISCUSSION

General

For discussion, the Apprenticeship computer printouts are divided into two parts. The first part describes the Individual Rating printouts. The second part describes the printouts of task, knowledge, and equipment, tool, and publications commonality for the SN and FN Apprenticeships. Only samples of pages from the computer printouts are contained in this research report to illustrate the formats developed.

Individual Rating Computer Printouts

These printouts are divided into four main parts for each of the 18 SN and seven FN ratings as follows:

FORM B Task Items
 FORM C Knowledge Items
 FORM D Equipment, Tools, and Publications
 FORM E Miscellaneous Data
 FORM E1 Physical Hazards of Job
 FORM E2 Worker Characteristics of Job
 FORM E3 Watch Standing Duties of Job
 FORM E4 Job Factor Personal Opinions

Each Task item (FORM B) (Figure 1) is divided into three main rows headed by the label PARTICIPATION STATUS. Each of these three main rows is labeled (1) E1/2, (2) E3, and (3) TOTAL, with four spaces provided for each heading labeled (1) NOT APPLICABLE, (2) SUPERVISE, (3) PERFORM, and (4) ASSIST. The first two columns are labeled NUMBER and PERCENTAGE with the E1/E2 and E3 numbers adding down to give the TOTAL; the percentages for each paygrade and TOTAL add up to 100. The remaining columns are divided into two main headings labeled (1) HOW OFTEN, which stands for "how often is task performed?," and (2) HOW LEARNED, which stands for "how was task learned?" The HOW OFTEN column is further divided into five sub-columns labeled (1) VERY LITTLE, (2) BELOW AVERAGE, (3) AVERAGE, (4) ABOVE AVERAGE, (5) VERY MUCH, with spaces provided for numbers and percentages of responses. Here the percentages across each row add up to 100, except for NOT APPLICABLE, which denotes that no tasks were performed for that row. The column heading HOW LEARNED is further divided into four sub-columns labeled (1) MOSTLY SCHOOL, (2) 50/50 SCHOOL AND EXPERIENCE, (3) MOSTLY WORK EXPERIENCE, (4) CIVILIAN TRAINING AND EXPERIENCE, with spaces provided for numbers and percentages. Here also, the percentages across each row add up to 100 except for NOT APPLICABLE, which denotes that no tasks were performed for that row.

Each Knowledge item (FORM C) (Figure 2) is divided into three columns labeled (1) E1/2, (2) E3, and (3) TOTAL. Each of those headings is further divided into YES and NO categories with spaces provided for numbers and percentages of responses. The row label is the Knowledge item itself. The numbers and percentages under the YES and NO categories for the TOTAL column heading yield the total numbers and percentages for E1/2 and E3 responses combined.

Each Equipment, Tool, and Publication item (FORM D) (Figure 3) is divided into three parts: (1) E1/2, (2) E3, and (3) TOTAL. Each of these parts is further divided into four sub-columns labeled (1) NOT USED, (2) OPERATE/USE, (3) MAINTAIN, and (4) BOTH, with spaces provided for numbers and percentages of responses. The row label is the item itself. The numbers and percentages under the categories NOT USED, OPERATE/USE, MAINTAIN, and BOTH for the TOTAL column yield the total numbers and percentages for E1/2 and E3 responses combined.

TASKS FORM B BOATSWAIN'S MATE
E1 & E2 N=516 E3 N=245 TOTAL N=761

| TASK NO. | | -----HOW OFTEN----- | | | | | | | | | | -----HOW LEARNED----- | | | | | | | | | |
|---|----------------|---------------------|----|---------------|----|---------------------------|----|---------------|----|----------------|----|-----------------------|----|--------------|----|--------------|-----|----------------|----|--|--|
| | | -VERY -LIT. | | BELOW AVG. | | AVG. ¹ AVG. | | ABOVE AVG. | | VERY- MUCH- | | -MOST -SCH. | | SCH/ EXP. | | MOST WORK | | CIV.- EXP.- | | | |
| | | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % | | |
| 103 INSTALL A BOAT COMPASS. | | | | | | | | | | | | | | | | | | | | | |
| P A R T I C I P A T I O N | NOT APPLICABLE | 472 | 91 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | | |
| | SUPERVISE | 3 | 01 | 2 | 67 | 1 | 33 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 2 | 67 | 1 | 33 | | |
| | PERFORM | 25 | 05 | 9 | 36 | 3 | 12 | 10 | 40 | 3 | 12 | 0 | 00 | 0 | 00 | 19 | 76 | 6 | 24 | | |
| | ASSIST | 16 | 03 | 13 | 81 | 2 | 13 | 1 | 06 | 0 | 00 | 0 | 00 | 1 | 06 | 0 | 00 | 14 | 88 | | |
| E1 & E2 | | | | | | | | | | | | | | | | | | | | | |
| E3 | NOT APPLICABLE | 190 | 78 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | | |
| | SUPERVISE | 3 | 01 | 1 | 33 | 0 | 00 | 1 | 33 | 0 | 00 | 1 | 33 | 0 | 00 | 3 | 100 | 0 | 00 | | |
| | PERFORM | 35 | 14 | 10 | 29 | 8 | 23 | 15 | 43 | 1 | 03 | 1 | 03 | 0 | 00 | 33 | 94 | 2 | 06 | | |
| | ASSIST | 17 | 07 | 13 | 76 | 2 | 12 | 2 | 12 | 0 | 00 | 0 | 00 | 0 | 00 | 16 | 94 | 1 | 06 | | |
| TOTAL | | 662 | 87 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | 0 | 00 | | |
| TOTAL | SUPERVISE | 6 | 01 | 3 | 50 | 1 | 17 | 1 | 17 | 0 | 00 | 1 | 17 | 0 | 00 | 5 | 83 | 1 | 17 | | |
| | PERFORM | 60 | 08 | 19 | 32 | 11 | 18 | 25 | 42 | 4 | 07 | 1 | 02 | 0 | 00 | 52 | 87 | 8 | 13 | | |
| | ASSIST | 33 | 04 | 26 | 79 | 4 | 12 | 3 | 09 | 0 | 00 | 0 | 00 | 1 | 03 | 30 | 91 | 2 | 06 | | |

Fig. 1. Sample of page from SN Apprenticeship Task computer printouts.

KNOWLEDGES-FORM C-BOWTSWAIN'S MATE
 E1/E2 N=516 E3 N=245 TOTAL N=761
 ITEM
 NO.

| | E1 & E2 | | E3 | | TOTAL | |
|------------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|
| | **YES** N % | **NO** N % | **YES** N % | **NO** N % | **YES** N % | **NO** N % |
| 82 IDENTIFY TYPES OF PAINT BRUSHES | 400 78 | 116 22 | 206 84 | 39 16 | 606 80 | 115 20 |

Fig. 2. Sample of page from SN Apprenticeship Knowledge computer printouts.

TOOLS & EQUIPMENT-FORM D-BOWTSWAIN'S MATE
 E1/E2 N=516 E3 N=245 TOTAL N=761

| ITEM NO. | E1 & E2 | | | | E3 | | | | TOTAL | | | |
|---------------|--------------------|---------------------|----------------------|-------------|--------------------|---------------------|----------------------|-------------|--------------------|---------------------|----------------------|-------------|
| | NOT USED N % | OPER/ USE N % | MAIN- TAIN N % | BOTH N % | NOT USED N % | OPER/ USE N % | MAIN- TAIN N % | BOTH N % | NOT USED N % | OPER/ USE N % | MAIN- TAIN N % | BOTH N % |
| 19 CARGO NETS | 228 44 | 192 37 | 18 3 | 78 15 | 47 19 | 116 47 | 5 2 | 77 31 | 275 36 | 308 40 | 23 3 | 155 20 |

Fig. 3. Sample of page from SN Apprenticeship Equipment, Tool, and Publication computer printouts.

Physical Hazards of the Job (FORM E1) (Figure 4) is divided into three parts: (1) E1/2, (2) E3, and (3) TOTAL. Each of these column headings is further divided into three sub-columns labeled (1) NONE, (2) OCCASIONALLY, and (3) FREQUENTLY, with spaces provided for numbers and percentages of responses. The row label is the Hazard item itself. The numbers and percentages under the categories NONE, OCCASIONALLY, and FREQUENTLY for the TOTAL column yield the total numbers and percentages for E1/2 and E3 responses combined.

Worker Characteristics of the Job (FORM E2) (Figure 4) is divided into three parts: (1) E1/2, (2) E3, and (3) TOTAL. Each of these column headings is further divided into four sub-columns labeled (1) NOT APPLICABLE, (2) BELOW AVERAGE, (3) AVERAGE, and (4) ABOVE AVERAGE, with spaces provided for numbers and percentages of responses. The row label is the Worker Characteristic item itself. The numbers and percentages under the categories NOT APPLICABLE, BELOW AVERAGE, AVERAGE, and ABOVE AVERAGE for the TOTAL column yield the total numbers and percentages for E1/2 and E3 responses combined.

Watch Standing Duties of Job (FORM E3) (Figure 4) is divided into three parts: (1) E1/2, (2) E3, and (3) TOTAL. Each of these column headings is further divided into six sub-columns labeled (1) NOT APPLICABLE, (2) IN PORT, (3) UNDERWAY, and (4) BOTH, with spaces provided for numbers and percentages of responses. The TIME SPENT column is further divided into three sub-columns labeled (1) 0-8 HOURS, (2) 8-16 HOURS, and (3) OVER 16 HOURS, with spaces provided for numbers and percentages of responses. The three rows are labeled (1) E1/2, (2) E3, and (3) TOTAL. The row percentages add up to 100.

Opinions of Job Factors (FORM E4) (Figure 4) is divided into three parts: (1) E1/2, (2) E3, and (3) TOTAL. Each of these column headings is further divided into six sub-columns labeled (1) NOT APPLICABLE, (2) VERY DISSATISFIED, (3) DISSATISFIED, (4) NO OPINION, (5) SATISFIED, and (6) VERY SATISFIED. The two rows are labeled (1) NUMBER, and (2) PERCENTAGES of responses for each job factor item. The sub-columns under the TOTAL column yield the total numbers and percentages for E1/2 and E3 responses combined. (NOTE: All percentages have been rounded off to the nearest whole number.)

Computer Printouts of Task, Knowledge, and Equipment, Tool and Publications Commonality Among SN and FN Apprenticeships

The SN and FN printouts are divided into three main parts each:

- FORM B Task Items
- FORM C Knowledge Items
- FORM D Equipment, Tools, and Publications

Each of the 94 Common Task items for SN (FORM B) (Figure 5) is divided into 19 columns labeled CS, DK, DP, PN, RM, SN, SH, SK, YN, BM, OS, QM, SM, ST, FT, GM, TM, ET, and TOTAL. Major row titles are E1/2 and E3, with four sub-titles, (1) NOT APPLICABLE, (2) SUPERVISE,

| PHYSICAL HAZARD: FORM E1 BOATSWAIN'S MATE | | | | | | | | | | | | | | |
|---|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|
| N=516 | | | | | | | | | | | | | | |
| E1 & E2 | | | | | | | | | | | | | | |
| N=245 | | | | | | | | | | | | | | |
| N=761 | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | |
| ITEM NO. | NONE | OCCASION. | FREQUENT. | NONE | OCCASION. | FREQUENT. | NONE | OCCASION. | FREQUENT. | NONE | OCCASION. | FREQUENT. | NONE | OCCASION. |
| | N | Z | N | Z | N | Z | N | Z | N | Z | N | Z | N | Z |
| 01 ELECTRICAL | 245 | 47 | 226 | 44 | 45 | 09 | 97 | 40 | 131 | 53 | 17 | 07 | 342 | 45 |
| | | | | | | | | | | | | | 357 | 47 |
| | | | | | | | | | | | | | 62 | 08 |
| WORKER CHARACTERISTICS FORM E2 BOATSWAIN'S MATE | | | | | | | | | | | | | | |
| N=516 | | | | | | | | | | | | | | |
| E1 & E2 | | | | | | | | | | | | | | |
| N=245 | | | | | | | | | | | | | | |
| N=761 | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | |
| ITEM NO. | N/A | N | Z | N | Z | N | Z | N | Z | N | Z | N | Z | N |
| 01 FINGER, HAND, WRIST, AND FOREARM STRENGTH | 50 | 10 | 14 | 03 | 267 | 52 | 185 | 36 | 13 | 05 | 5 | 02 | 139 | 57 |
| | | | | | | | | | | | | | 88 | 36 |
| | | | | | | | | | | | | | 63 | 08 |
| | | | | | | | | | | | | | 19 | 02 |
| | | | | | | | | | | | | | 406 | 53 |
| | | | | | | | | | | | | | 273 | 36 |
| WATCH STANDINGS FORM E3 BOATSWAIN'S MATE | | | | | | | | | | | | | | |
| E3 N=245 | | | | | | | | | | | | | | |
| TOTAL N=761 | | | | | | | | | | | | | | |
| ITEM NO. | N/A | N | Z | N | Z | N | Z | N | Z | N | Z | N | Z | N |
| 01 AFTER STEERING WATCH | 378 | 73 | 7 | 01 | 121 | 23 | 10 | 02 | 90 | 65 | 19 | 14 | 29 | 21 |
| | | | | | | | | | | | | | 41 | 53 |
| | | | | | | | | | | | | | 10 | 13 |
| | | | | | | | | | | | | | 26 | 34 |
| | | | | | | | | | | | | | 131 | 61 |
| | | | | | | | | | | | | | 29 | 13 |
| | | | | | | | | | | | | | 55 | 26 |
| JOB FACTORS FORM E4 BOATSWAIN'S MATE | | | | | | | | | | | | | | |
| N=516 | | | | | | | | | | | | | | |
| E1 & E2 | | | | | | | | | | | | | | |
| N=245 | | | | | | | | | | | | | | |
| N=761 | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | |
| ITEM NO. | N/A | N | Z | N | Z | N | Z | N | Z | N | Z | N | Z | N |
| 01 OPPORTUNITY FOR ACHIEVEMENT | 97 | 94 | 67 | 122 | 125 | 11 | 19 | 43 | 42 | 54 | 81 | 6 | 116 | 137 |
| | | | | | | | | | | | | | 109 | 176 |
| | | | | | | | | | | | | | 206 | 17 |
| | | | | | | | | | | | | | 15 | 18 |
| | | | | | | | | | | | | | 14 | 23 |
| | | | | | | | | | | | | | 27 | 02 |

Fig. 4. Sample of page from SN Apprenticeship computer printouts for Form E.

(3) PERFORM, and (4) ASSIST, for each major row. Spaces are provided for numbers and percentages of responses. The column (Rating) percentages add up to 100 for E1/2 and E3 separately.

The description of the Common FN Task printouts is the same as for the SN, except that there are only eight column headings, labeled BT, EM, EN, HT, IC, MM, MR, TOTAL, and 90 items instead of 94.

Each of the 67 Common Knowledge items for SN and 77 for FN (FORM C) (Figure 6) has column headings labeled the same as for the SN and FN Common Tasks just described. The rows are different in that for E1/2 and E3 there are YES and NO labels, with spaces provided for numbers and percentages of responses. The column (Rating) percentages add up to 100 for E1/2 and E3 separately.

Each of the 294 Common Equipment, Tools, and Publications items for both SN and FN (FORM D) (Figure 7) has column headings labeled the same as for the SN and FN Common Task and Knowledge items described above. The rows are different in that for E1/2 and E3 there are four labels: (1) NOT USED, (2) OPERATE/USE, (3) MAINTAIN, (4) BOTH, with spaces provided for numbers and percentages of responses. The column (Rating) percentages add up to 100 for E1/2 and E3 separately. (NOTE: All percentages have been rounded off to the nearest whole number.)

FINDINGS

1. An effective method of compiling a task inventory involves the employment of job experts (senior enlisted personnel).
2. By proper design of task inventory packaging, several rates/ratings can be effectively sampled simultaneously.
3. Teams trained in data gathering who personally administer questionnaires acquire very accurate data.
4. Sample sizes can be kept to reasonable numbers if statistically sound procedures are employed.
5. Close coordination between project personnel and shipboard command personnel is necessary to ensure the proper environment for conducting surveys.
6. Development of common task, knowledge, and tool inventories for SN and FN Apprenticeships is feasible and highly desirable.

SN COMMON KNOWLEDGES

ITEM

NO.

1 THE PURPOSE AND CONTENT OF A WATCH, QUARTER & STATION BILL

RATING

| | CS | DK | DP | PN | RM | SD | SH | SK | YN | BM | OS | QM | SM | ST | FT | GM | TM | ET | TOTAL |
|---------|------|----|----|----|----|----|----|----|----|-----|----|----|----|----|----|----|-----|----|-------|
| YES | N 18 | 7 | 1 | 6 | 24 | 15 | 24 | 32 | 14 | 455 | 46 | 13 | 10 | 7 | 6 | 50 | 8 | 5 | 741 |
| E1 & E2 | % 62 | 88 | 33 | 55 | 83 | 79 | 69 | 71 | 74 | 88 | 96 | 76 | 91 | 78 | 75 | 89 | 100 | 83 | 84 |
| NO | N 11 | 1 | 2 | 5 | 5 | 4 | 11 | 13 | 5 | 61 | 2 | 4 | 1 | 2 | 2 | 6 | 0 | 1 | 136 |
| | % 38 | 12 | 67 | 45 | 17 | 21 | 31 | 29 | 26 | 12 | 4 | 24 | 9 | 22 | 25 | 11 | 0 | 17 | 16 |
| YES | N 16 | 11 | 7 | 13 | 75 | 63 | 44 | 40 | 32 | 227 | 55 | 47 | 35 | 12 | 31 | 65 | 15 | 30 | 818 |
| E3 | % 59 | 79 | 58 | 54 | 90 | 77 | 71 | 71 | 71 | 93 | 96 | 90 | 95 | 63 | 91 | 90 | 94 | 81 | 83 |
| NO | N 11 | 3 | 5 | 11 | 8 | 19 | 18 | 16 | 13 | 18 | 2 | 5 | 2 | 7 | 3 | 7 | 1 | 7 | 156 |
| | % 41 | 21 | 42 | 46 | 10 | 23 | 29 | 29 | 29 | 7 | 4 | 10 | 5 | 37 | 9 | 10 | 6 | 19 | 17 |

Fig. 6. Sample of page from SN Apprenticeship Common Knowledge computer printouts.

SN COMMON EQUIPMENT, TOOLS & PUBLICATIONS

ITEM NO.

172 PAINT BRUSHES

| | CS | DK | DP | PN | RM | SD | SH | SK | YN | BM | OS | QM | SM | ST | FT | GM | TM | ET | TOTAL |
|-------------|------|----|-----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|-------|
| NOT USED | N 19 | 6 | 3 | 10 | 11 | 11 | 24 | 27 | 13 | 36 | 17 | 9 | 0 | 0 | 0 | 10 | 3 | 4 | 203 |
| | % 66 | 75 | 100 | 91 | 38 | 58 | 69 | 60 | 68 | 07 | 35 | 53 | 00 | 00 | 00 | 18 | 38 | 67 | 23 |
| OPERATE/USE | N 6 | 1 | 0 | 1 | 12 | 7 | 9 | 16 | 6 | 322 | 26 | 8 | 6 | 7 | 7 | 29 | 4 | 2 | 469 |
| | % 21 | 13 | 00 | 09 | 41 | 37 | 26 | 36 | 32 | 62 | 54 | 47 | 55 | 78 | 88 | 52 | 50 | 33 | 53 |
| MAINTAIN | N 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 19 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 23 |
| | % 00 | 00 | 00 | 00 | 03 | 00 | 03 | 00 | 00 | 04 | 00 | 00 | 00 | 11 | 00 | 02 | 00 | 00 | 03 |
| BOTH | N 4 | 1 | 0 | 0 | 5 | 1 | 1 | 2 | 0 | 139 | 5 | 0 | 5 | 1 | 1 | 16 | 1 | 0 | 182 |
| | % 14 | 13 | 00 | 00 | 17 | 05 | 03 | 04 | 00 | 27 | 10 | 00 | 45 | 11 | 13 | 29 | 13 | 00 | 21 |

NOT USED

OPERATE/USE

MAINTAIN

BOTH

E1 & E2

E3

| | | | | | | | | | | | | | | | | | | | |
|-------------|------|----|----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|-----|
| NOT USED | N 18 | 10 | 10 | 21 | 28 | 46 | 42 | 31 | 36 | 12 | 21 | 10 | 4 | 5 | 10 | 10 | 1 | 18 | 333 |
| | % 67 | 71 | 83 | 88 | 34 | 56 | 68 | 55 | 80 | 05 | 37 | 19 | 11 | 26 | 29 | 14 | 06 | 49 | 34 |
| OPERATE/USE | N 7 | 4 | 2 | 2 | 40 | 26 | 15 | 19 | 7 | 141 | 31 | 31 | 24 | 12 | 20 | 41 | 12 | 15 | 449 |
| | % 26 | 29 | 17 | 08 | 48 | 32 | 24 | 34 | 16 | 58 | 54 | 60 | 65 | 63 | 59 | 57 | 75 | 41 | 46 |
| MAINTAIN | N 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 11 |
| | % 00 | 00 | 00 | 00 | 02 | 00 | 03 | 02 | 00 | 02 | 00 | 02 | 00 | 00 | 00 | 01 | 00 | 00 | 01 |
| BOTH | N 2 | 0 | 0 | 1 | 13 | 10 | 3 | 5 | 2 | 88 | 5 | 10 | 9 | 2 | 4 | 20 | 3 | 4 | 181 |
| | % 07 | 00 | 00 | 04 | 16 | 12 | 05 | 09 | 04 | 36 | 09 | 19 | 24 | 11 | 12 | 28 | 19 | 11 | 19 |

Fig. 7. Sample of page from SN Apprenticeship Common Equipment, Tools, and Publications computer printouts.

RECOMMENDATIONS

Recommendations are presented in two parts corresponding to the two objectives of this research effort: (1) to try out job analysis tools and techniques for adequate data gathering, and (2) to employ these tools and techniques to gather task data to determine actual work being performed by SN and FN Apprenticeships.

The findings under the first objective lead to reinforcement of the following recommendations for data gathering:

1. Use job experts (senior enlisted personnel) for the compilation of effective task inventories (page 5).
2. Design and package occupational data gathering instruments so that several rates/ratings may be sampled simultaneously (page 5).
3. Use trained teams that personally administer questionnaires to increase accuracy (page 9).
4. Determine sample sizes statistically so that the obtained data will represent the population data to a sufficiently precise degree (page 2).
5. Maintain close coordination between project personnel and shipboard command personnel when conducting shipboard surveys in order to ensure a proper environment for administering questionnaires (page 6).

Recommendations for the second objective of this research effort are to use the data gathered as follows: to determine training course requirements; to update the recruit training curriculum; to augment Naval Occupational Task Analysis Program (NOTAP) data bank, and to update Personnel Qualification Standards (PQS) and qualifications for advancement.

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- McDowell, H. C., & Hulegaard, G. S. New concepts to improve training and shipboard manpower utilization in the Engineering and Hull ratings: Statistical analysis. San Diego: Naval Personnel and Training Research Laboratory, June 1972. (SRR 72-26)
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Rate Training Manuals

Basic Electricity. NAVTRA/NAVPERS, 1969. (10086-B)

Basic Electronics, Vols. I & II. NAVTRA/NAVPERS, 1971. (10087-C)

Basic Machines. NAVTRA/NAVPERS, 1965. (10624-A)

Boatswain's Mate 3 & 2. NAVTRA/NAVPERS, 1964. (10121-D)

Boiler Technician 3 & 2. NAVTRA/NAVPERS, 1971. (10535-F)

Commissaryman 3 & 2. NAVTRA/NAVPERS, 1971. (10279-E)

Data Processing Technician 3 & 2. NAVTRA/NAVPERS, 1970.
(10264-B)

Disbursing Clerk 3 & 2 (Advanced copy, Chapters 13, 14, and 17).
NAVTRA/NAVPERS, 1973. (10274-G)

Electrician's Mate 3 & 2. NAVTRA/NAVPERS, 1971. (10546-C)

Electronics Technician 3 & 2, Vol. 1. NAVTRA/NAVPERS, 1972.
(10195-A)

Engineman 3 & 2. NAVTRA/NAVPERS, 1971. (10541-B)

Fire Control Technician G 3 & 2. NAVTRA/NAVPERS, 1969.
(10207)

Fireman. NAVTRA/NAVPERS, 1971. (10520-D)

Gunner's Mate G 3 & 2. NAVTRA/NAVPERS, 1970. (10185-A)

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(10573)

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Radarman 3 & 2 (Operations Specialist). NAVTRA/NAVPERS, 1971.
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Seaman. NAVTRA/NAVPERS, 1971. (10120-F)

Ship's Serviceman 3 & 2. NAVTRA/NAVPERS, 1970. (10286-F)

Signalman 3 & 2. NAVTRA/NAVPERS, 1971. (10135-D)

Sonar Technician G 3 & 2. NAVTRA/NAVPERS, 1972. (10131-C)

Steward 3 & 2. NAVTRA/NAVPERS, 1971. (10694-D)

Storekeeper 3 & 2. NAVTRA/NAVPERS, 1971. (10269-G)

Torpedoman's Mate 3 & 2. NAVTRA/NAVPERS, 1971. (10163-B)

Yeoman 3 & 2. NAVTRA/NAVPERS, 1970. (10240-F)

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APPENDICES

(REVERSE SIDE BLANK)

APPENDIX A

LETTER OF AUTHORIZATION TO CONDUCT RESEARCH PROJECT

This letter from the Deputy Director of Naval Education and Training authorizes initiation of work by this Center.

(REVERSE SIDE BLANK)

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, D. C. 20350

C
O
P
Y

In Reply Refer To
OP-991D2/lcm
Ser 68P991
9 MAR 1972

From: Chief of Naval Operations
To: Chief of Naval Personnel

Subj: Personnel Research Projects; request for

Ref: (a) CNTECHTRA ltr Code 3 of 1 Dec 71
(b) CNT ltr Code N5 of 17 Jan 72

1. Reference (a) was a report of the conclusions and recommendations of the Recruit Training Conference held at NAS Memphis, 1-3 November 1971. In reference (b) the Chief of Naval Training approved certain of the actions recommended in reference (a). The Chief of Naval Operations (OP-99) is coordinating the requests for assistance from activities outside the Naval Training Command.
2. One recommendation of the conference was that the qualifications for advancement to E2/E3 be revised. Presently there is no research-supported definition of what tasks and duties the newly graduated recruit is to perform. Therefore, the qualifications for advancement, and the training objectives, historically have been based on what was generally thought to be fleet requirements rather than on what has been soundly determined.
3. In order to support the Chief of Naval Training in his efforts to upgrade and improve the basic training for recruits, the Chief of Naval Personnel is requested to:
 - a. Initiate for the Seaman, Fireman and Constructionman apprenticeships a task analysis similar to that produced for the Airman apprenticeship (SRR 72-7) and publish the results.
 - b. Upon completion of the analyses requested above, initiate action to revise the current Manual of Qualifications for Advancement (NAVPERS 18068C) to reflect the findings of these analyses.
4. The Chief of Naval Technical Training, in conjunction with the revision of the qualifications for advancement, will revise the curricula for basic recruit and apprenticeship training to reflect the new standards.
5. It is requested that these projects be completed at the earliest practical time, but not later than 1 May 1973.

/s/ V. G. LAMBERT
Deputy Director
Naval Education and Training

Copy to:
CNT
CNTECHTRA

APPENDIX B

WORK REQUIREMENTS SURVEY BOOKLETS FOR THE SN APPRENTICESHIPS

This Appendix consists of one complete Work Requirements Survey Booklet, which was packaged to facilitate gathering of data for the 18 SN Apprenticeships surveyed. The FN package, which is similar to the SN, is not included due to space limitations, but is available on request.

(REVERSE SIDE BLANK)

WORK REQUIREMENTS SURVEY

Seaman Apprentice



BM

GM

SH

CS

OS

SK

DK

PN

SM

DP

QM

ST

ET

RM

TM

FT

SD

YN



**NAVAL PERSONNEL and TRAINING RESEARCH
LABORATORY**

SAN DIEGO, CALIFORNIA 92152

I M P O R T A N T

It is not intended that the responses to the work requirements survey result in disclosure of classified information. However, if in checking the survey, classified information is disclosed, then the survey should be handled in accordance with existing security regulations.

F O R E W O R D

The Chief of Naval Personnel (Pers-A3) has directed this Laboratory to conduct research to determine the work requirements of the Seaman Apprenticeship Group.

The survey is being conducted primarily to bring training curricula in alignment with actual work requirements. Other aims of the survey are to assist in qualification development, restructuring of ratings, job satisfaction and billet structuring.

The information obtained by this questionnaire will be used for research purposes only. The results will be reported in summary form and the responses of individuals will not be revealed. This is not a test.

GENERAL INSTRUCTIONS

NOTE: This survey package is composed of two parts: (1) A Work Requirements Survey (this booklet) and (2) a separate Job Description Index (Response Packet.)

1. Do not write in this booklet. Comments may be made on the extra sheet furnished with the Response Packet.
2. Make all your marks in the Response Packet with the pencil provided.
3. Indicate your answer with a heavy black mark that completely fills the circle.
4. Erase completely all changes.
5. Make sure hands are clean before handling Response Packet as grease and dirt smudges make pamphlet processing impossible.
6. Make sure your Social Security Number is written on every page of the Response Packet in the space provided.

This Work Requirements Survey Booklet is composed of several ratings, each of which is divided into the following nine parts:

- PART A - Contains specific instructions for filling in personal information on Form A of Response Packet.
- PART B - Is a list of the numerous tasks in your rate. You are to mark those that have been performed by you aboard this ship. (Tasks are listed in this booklet with spaces for your responses located in the Response Packet.)
- PART C - Is a list of knowledge items in your rate. You are to mark those items that you have been required to know while aboard this ship. (Knowledge items are listed in this booklet with spaces for your responses located in the Response Packet.)
- PART D - Is a list of equipment, tools, and publications common to your rate. You are to mark those that have been used by you while aboard this ship. (Equipment, tools, and publications are listed in this booklet with spaces for your responses located in the Response Packet.)
- PART E1 - Is a list of physical hazards that may be encountered by you on your job. (Hazards are listed in this booklet with spaces for your responses located in the Response Packet.)
- PART E2 - Is a list of worker characteristics that may be required in the performance of your job. (Worker characteristics are listed in this booklet with spaces for your responses located in the Response Packet.)
- PART E3 - Is a list of watches normally performed by nonrated personnel. (The list of watches are located in this booklet with spaces for your responses located in the Response Packet.)
- PART E4 - Is an attempt to get some of your personal opinions about your job as you see it. (Personal opinion items are located in this booklet with spaces for your responses located in the Response Packet.)

Turn page for Special Instructions.

PART A - PERSONAL INFORMATION

(Located on Form A of Response Packet.)

Special Instructions

Most of the data on the first page of your Response Packet are self-explanatory and can be furnished from your own knowledge; however, some of the data may need to be obtained from the ship's office.

BOATSWAIN'S MATE (BM)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.).
86. Turn on ship's lights (standing, running).
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

BOATSWAIN'S MATE TASKS

Marlinspike Seamanship

95. Insert Jackass into chain pipes.
96. Operate a warping tug.
97. Assembly and disassemble a causeway.
98. Use a deck crane.
99. Rig for anchoring.

Turn to the next page of your Response Packet.

Small Boat Seamanship

1. Read and interpret navigational charts.
2. Use navigational charts to determine course and speed.
3. Determine a course using a boat compass.
4. Install a boat compass.
5. Use a boat compass.

Administrative Duties

6. Make entries in the anchor log.
7. Make entries in the Boat's compass log.
8. Prepare Hull History Cards.
9. Maintain Current Ship's Maintenance Project (CSMP) file.
10. Maintain painting records.
11. Send and receive by semaphore.
12. Send and receive by flashing light.
13. Solve maneuvering board problems for closest point of approach (CPA).
14. Solve maneuvering board problems for course and speed.
15. Plot ship's information using a maneuvering board.

Damage Control

16. Act as a member of a repair party.
17. Shore up bulkheads and decks.
18. Make emergency repairs to holes in bulkheads and decks.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and flourescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

BOATSWAIN'S MATE KNOWLEDGE ITEMS

In performing your job, are you required to know how to:

68. Estimate weight of cargo to be hoisted?
69. Compute breaking strength of block and tackle, line or wire?
70. Identify piping and ventilation systems aboard ship?
71. Identify damage control communications systems?
72. Identify material conditions of readiness?
73. Identify alphabetic and numeric flags?
74. Identify standard flaghoists for replenishment at sea?
75. Identify debarkation station markings by flaghoist?
76. Identify storm warning and display signals?
77. Use international rules of the road for lights, sound signals, meeting, crossing, overtaking and distress signals?
78. Use inland rules of the road for lights, sound signals, meeting, crossing, overtaking and distress signals?
79. Use international and inland rules of the road for meaning of the general prudential rule and the rule of good seamanship?

- 80. Use anchoring and mooring procedures?
- 81. Identify types and uses of spray guns and containers?
- 82. Identify types of paint brushes?
- 83. Identify types of sandpaper by size of abrasive?
- 84. Use bell signals to power boat engineer?

Turn to Part D, Page 195.

COMMISSARYMAN (CS)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

COMMISSARYMAN TASKS

95. Inspect canned goods for dents, swellings, and leaks.
96. Inspect dry foods, such as flour, rice, etc. for worms, insects, and mice and rat droppings.
97. Inspect milk and milk products to insure against contamination by souring or foreign matter.
98. Inspect sea foods for deterioration.
99. Inspect fresh vegetables for spoilage.

Turn to the next page of your Response Packet.

1. Inspect fresh fruits for spoilage.
2. Inspect frozen food items for deterioration.
3. Inspect food for contamination by chemical and biological agents.
4. Clean trays, dishes, cups, glassware, knives, forks, and spoons.

5. Clean food preparation equipment such as ovens, coffee urns, and steam kettles.
6. Clean mess deck, mess tables, and serving tables.
7. Clean food serving dispensers.
8. Clean meat slicers, saws, chopping boards.
9. Clean food serving areas such as steam tables, salad bars, and bread or pastry tables.
10. Clean refrigerators and freezers.

Food Preparation

11. Use Armed Forces Receipt Service.
12. Use guidance card.
13. Use food preparation worksheet.
14. Make computations for correct number of rations.
15. Slice meat using knife and fork.
16. Slice meat with slicing machine.
17. Cut meat using cleaver.
18. Cut meat bones using hand saw.
19. Cut meat bones using electric saw.
20. Carve poultry using knife and fork.

Work on Serving Line

21. Fill steam table with hot water.
22. Place food containers in slots.
23. Serve Soup.
24. Serve vegetables.
25. Carve meat and poultry.
26. Serve meat.
27. Set-up salad bar.
28. Set-up bread and pastry table.
29. Set-up milk dispenser.
30. Set-up cold juice dispenser.
31. Make coffee.

Conservation of Subsistence Items

32. Rotate perishable foods in reefers.
33. Stow perishable foods in reefers.
34. Break out perishable foods from reefers.

35. Rotate nonperishable foods in storage areas.
36. Stow nonperishable foods in storage areas.
37. Break out nonperishable foods from storage areas.

Administration

38. Prepare and submit subsistence requisitions.
39. Prepare and maintain Requisitions Logs.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

COMMISSARYMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. The use of insect and rodent control materials?
69. The operation of the scullery?
70. The operation of food preparation machinery?
71. The handling of food preparation hand tools?
72. The sanitation methods and sterilization temperatures in handling and cleaning food preparation?
73. The types and causes of food-borne illnesses and the methods for prevention?
74. The principles of personal hygiene?
75. The safe temperatures and humidity ranges for storing food products?
76. The characteristics of spoiled food products?
77. The proper procedures to be used in sanitizing the dining area?
78. The proper method in the operation and cleaning of the scullery and related equipment?
79. The required holding temperature and time limitations to be used in food preparation?

80. How to convert quantities for number of portions to be prepared based on standard recipe measures?
81. The definition of standard food service terms?
82. The general content and use of the Armed Forces Recipe Service?
83. The functions of fats, oils, seasonings, garnishes, and condiments in cooking?
84. The procedures for handling, thawing, and preparing frozen food items?
85. The classes of foods and the functions of each in the diet?
86. The location of cuts of meat on carcasses, and relationship of location to methods of cooking?
87. How to identify over-age food products?
88. The procedure on the movement of food products from refrigerated spaces?
89. The procedure on the movement of food products from bulk storerooms?
90. The procedure on the movement of food products from subsistence issue rooms?
91. The proper preparation and service of food products?
92. The proper stowage and break-out of subsistence items?
93. The organization and areas of responsibility within the food service division?
94. The general content and use of the Food Operations Reference Manual?
95. The general organization and functions of the Supply Department?
96. The effect of detergents and other cleaning agents on water and as a pollutant?
97. The methods for disposing of waste products with minimum effect on the environment?
98. The effect of waste food products on water pollution?
99. The danger to health from the use of polluted materials?
100. The safety regulations concerning the use of the deep fat fryer?

Turn to Part D, Page 195.

DISBURSING CLERK (DK)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.).
86. Turn on ship's lights (standing, running).
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

DISBURSING CLERK TASKS

Interpret the accounting classification codes.

95. Screen for accuracy.
96. Make appropriate ledger entry.

Maintain officer and enlisted pay records.

97. Open pay records.
98. Determine authorization for pay and allowances.
99. Compute pay and allowances.

Turn to the next page of your Response Packet.

1. Verify pay entry base dates and longevity.
2. Verify special pay entitlements.
3. Compute leave balances and credits.
4. Make pay record entries.

5. Perform military payroll verification.
6. Prepare Navy money lists.
7. Validate pay receipts.
8. Prepare U. S. Treasury checks.
9. Close pay records.
10. Open temporary pay records.
11. Maintain temporary pay records.
12. Close temporary pay records.

Process Allotment Requests

13. Prepare documents to start allotments.
14. Prepare documents to change allotments.
15. Advise ship's personnel on allotments.
16. Post allotment to pay record.
17. Maintain files of allotment actions.
18. Prepare correspondence concerning allotments.
19. Prepare documents to stop allotments.

Prepare Travel and Transportation Documents

20. Interpret various travel orders.
21. Compute basic travel entitlements.
22. Process travel claims for payment.
23. Prepare transportation requests.
24. Prepare MAC transportation authorization.
25. Compute travel advances.
26. Prepare travel claims.
27. Prepare travel vouchers.

Process Public Vouchers

28. Prepare Public Vouchers.
29. Make entries in Voucher Log.
30. Verify voucher accounting data.

Process Reports and Returns

31. Prepare pay record reports and returns.
32. Prepare financial returns.
33. Prepare checking account (depository) returns.
34. Prepare special financial reports (such as foreign currency).
35. Prepare message reports.

Process F.I.C.A., S.G.L.I., Income Tax

- 36. Compute federal income tax withholdings.
- 37. Compute F.I.C.A. Tax.
- 38. Prepare S.G.L.I. forms.
- 39. Prepare wage and tax statements.

Perform Administrative/Clerical Duties

- 40. File and maintain manuals and directives.
- 41. Prepare standard Navy correspondence.
- 42. Route and file correspondence.
- 43. Route and file forms.
- 44. Requisition and issue forms.

General

- 45. Act as guard for the Disbursing Officer.
- 46. Act as an agent cashier (have funds).
- 47. Order and stow supplies.
- 48. Maintain a locator file.
- 49. Maintain a saving's deposit book.
- 50. Prepare saving's deposit receipts.
- 51. Maintain organized reserve pay records.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

DISBURSING CLERK KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. The types and uses of Navy funds?
69. Terminology associated with funds?
70. Common appropriation symbols and titles?
71. Accounting classifications and unit identification codes?
72. Regulations governing basic pay and allowances for officer personnel?
73. Regulations governing basic pay and allowances for enlisted personnel?
74. Regulations governing basic pay and allowances for separations?
75. Regulations governing basic pay and allowances for reenlistment?
76. Regulations governing basic pay and allowances for extension of enlistment?
77. Regulations governing basic pay and allowances for special payments?
78. Regulations governing basic pay and allowances for incentive pay?

79. Regulations governing basic pay and allowances for loss of pay resulting from disciplinary actions?
80. Regulations governing basic pay and allowances for unauthorized absence?
81. Regulations governing basic pay and allowances for leave rations?
82. Regulations governing basic pay and allowances for shore patrol duty?
83. The Navy enlisted rating structure and paygrades?
84. The Navy officer rank structure and paygrades?
85. The policies for leave accounting?
86. The contents of officer pay records?
87. The contents of enlisted pay records?
88. The procedures for transferring pay records?
89. The procedures for receiving pay records?
90. The procedures for maintaining physical security of pay records?
91. The procedures regarding allotments for deserters or absentees?
92. The procedures for opening/closing savings deposit accounts?
93. The procedures for preparing savings deposit reports?
94. The documents necessary to support required travel vouchers?
95. The regulations governing advance payment of travel and transportation allowances?
96. The regulations governing the preparation of public vouchers?
97. How to prepare and use standard form 1034 (Public Voucher for Purchase of Services Other Than Personal)?
98. The regulations governing the preparation of depository account returns?
99. The regulations governing the preparation of financial returns?
100. The regulations governing the preparation of message reports?
101. The regulations governing the preparation of foreign currency reports?
102. The standard organization and functions of the Supply Department?
103. The qualifications and duties of Navy disbursing officers?
104. The regulations governing the withholding of Federal Income Tax and FICA Tax?
105. The necessary pay record entries for taxes withheld?
106. The names, scope, general content, and purpose of disbursing publications?
107. The scope and purpose of the Navy Directives System?

Turn to Part D, Page 195.

DATA PROCESSING TECHNICIAN (DP)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.).
86. Turn on ship's lights (standing, running).
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

DATA PROCESSING TECHNICIAN TASKS

Data Cards

95. Key punch a data card manually.
96. Key punch using program control (card drum).
97. Clear a card jam in the keypunch.
98. Change the print ribbon
99. Verify a data card manually.

Turn to the next page of your Response Packet.

1. Verify a data card using program control.
2. Clear a card jam in the verifier.
3. Transmit data with a data transceiver.
4. Receive data with a data transceiver.
5. Determine sequence for multiple sorts on a card sorter.

6. Set-up a card sorter.
7. Clear a card jam in the sorter.
8. Operate a card interpreter.
9. Wire a sorter control panel.
10. Use selection for interpreter print area.
11. Change interpreter print area.
12. Clear a card jam in the interpreter.
13. Operate a card reproducer.
14. Use selective reproduction procedures.
15. Use gangpunch procedures.
16. Use mark sensed card input.
17. Use reproducer comparing function.
18. Wire a reproducer control panel.
19. Clear a card jam in the reproducer.
20. Use the end print function.
21. Operate a card collator.
22. Use a collator for checking sequence.
23. Use a collator for merging cards.
24. Use a collator for matching cards.
25. Use a collator for card selection.
26. Wire a collator control panel.
27. Clear a card jam in the collator.
28. Operate a decollator.
29. Operate an accounting machine.
30. Set-up an accounting machine for detail printing.
31. Set-up an accounting machine for group printing.
32. Set-up an accounting machine for accumulating function.
33. Set-up an accounting machine for programming (card compare) function.
34. Set-up an accounting machine for summary punching.
35. Change the printer ribbon.
36. Clear a card jam in an accounting machine.
37. Prepare a program tape for carriage control.
38. Wire an accounting machine control panel.

Computer

39. Set-up and operate a data processing computer.
40. Use internal program storage.
41. Use external program storage.
42. Use data input from punched cards.
43. Use data input from magnetic tape.
44. Use data input from paper tape.
45. Initiate restart procedures on automatic error detection.
46. Interpret processor stoppage indicators.
47. Interpret visual displays of registers, storage, etc.
48. Return computer system to preceeding checkpoint.
49. Use "stepping" procedures to examine program.
50. Clear error and restart program.
51. Maintain and physically inventory tape files.
52. Issue and receive tapes by schedule.
53. Control tapes on a rotational basis.
54. Prepare tape usage reports.
55. Maintain tape use logs, labels.
56. Test tapes for quality.
57. Clean tapes.
58. Degausse tapes.

Administration

59. Record source documents.
60. Code source documents.
61. Arrange source documents.
62. File source documents.
63. Design card layout formats.
64. Read and interpret work sequence flow charts.
65. Process data as indicated on flow chart.
66. Use procedure manuals.
67. Record processing operations performed.
68. Balance procedure results.
69. File and maintain manuals and directives.
70. Prepare standard Navy correspondence.

71. Route and file correspondence.

72. Maintain forms file.

73. Requisition and issue forms.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and flourescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

DATA PROCESSING TECHNICIAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. The methods and procedures for handling and stowing cards?
69. The principles of functional wiring?
70. The methods and purpose of gauging punch cards?
71. The system of Hollerith coding?
72. The forward, purpose, and general contents of ADP Glossary, NAVSO P-3097?
73. The characteristics of binary, header, laced, magnetic and punched cards?
74. The definitions of bit, byte, word, field?
75. The methods for beginning of tape and end of tape marking?
76. The differences and general uses of general and special purpose computers?
77. The general characteristics and differences of first, second, and third generation computers?

78. The characteristics of master and transaction files?
79. The characteristics and functions of dish, drum, tape and core storage?
80. The definitions of offline and online operations?
81. The conditions of match processing?
82. The characteristics and functions of positional notation?
83. The differences and uses of source and object programs?
84. The general characteristics and differences of ADP, EAM, and EDP?
85. The types, definitions, and uses of DOD standard flow chart symbols?
86. The general content of information within the Security Manual for classified information?
87. The accounting, control, and dissemination of classified material?
88. The stowage of classified material?

Turn to Part D, Page 195.

ELECTRONICS TECHNICIAN (ET)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.).
86. Turn on ship's lights (standing, running).
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

ELECTRONICS TECHNICIAN TASKS

Maintenance of Equipment

95. Inspect equipment.
96. Clean equipment.
97. Lubricate equipment
98. Test equipment components.
99. Remove equipment components.

Turn to the next page of your Response Packet.

1. Replace equipment components.
2. Select proper tools.
3. Maintain hand tools.
4. Use hand tools properly.
5. Perform operational tests.

6. Make adjustment on equipment.
7. Utilize Distribution Patching System for transmitters - local and remote.
8. Utilize Distribution Patching System for receivers - local and remote.
9. Utilize Distribution Patching System for antennas - local and remote.
10. Make electrical splices.
11. Make electrical connections.
12. Make electrical solder joints.
13. Read schematic or wiring diagrams of circuits.
14. Identify electrical symbols.
15. Identify electronic symbols.
16. Identify mechanical symbols.
17. Operate and use teletype distortion test sets.
18. Locate components, assemblies, and subassemblies using block diagrams and technical publications.
19. Identify components, assemblies, and subassemblies using block diagrams and technical publications.
20. Localize electronic equipment failures to subassemblies or parts.
21. Repair failures of equipment by repair or replacement of subassemblies or parts.
22. Make sensitivity measurements.
23. Make selectivity measurements.
24. Align equipment master oscillators using secondary standards.
25. Demonstrate proper servicing procedures for solid state components or repairable miniaturized circuits.
26. Operate crystal checker.
27. Operate capacitance - inductance - resistance bridge
28. Operate audio frequency signal generator.
29. Operate range marker generator.
30. Operate synchroscope.
31. Operate RF power meter.
32. Operate electronic counter.
33. Operate voltage standing wave ratio meter.
34. Install field changes to electronic equipment.
35. Align multivibrators and blocking circuits and other generating circuits by synchronizing with sinewave.

36. Align by submultiples of trigger frequency.
37. Align by use of positive and negative pulses.
38. Align by testing, adjusting, and repairing electromechanical servomechanisms.
39. Align by testing, adjusting, and repairing synchro control circuits.
40. Align by analyzing and evaluating waveforms of circuits.
41. Align by locating and identifying primary circuits.
42. Align by locating and identifying casualty power circuits.
43. Align by making performance tests with test equipment.

Administration Practical Factors

44. Take inventories of tools.
45. Take inventories of portable test equipment.
46. Use technical and supply publication.
47. Prepare requisitions for parts and tools.
48. Use technical and maintenance publications to maintain and repair electronic equipment.
49. Enter authorized changes to publications.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

ELECTRONICS TECHNICIAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. Definition of electrical terms?
69. Definition of magnetic terms?
70. Definition of electronic terms?
71. Methods of coding and marking electronic components?
72. Relationship and calculation of current, voltage, resistance, and power in DC series parallel and AC series parallel circuits?
73. The relationship of conductor length to resistance?
74. The relationship of cross sectional area to resistance?
75. The relationship of temperature to resistance?
76. The methods of obtaining bias for transistors and electron tubes?
77. Basic theory of AC and DC motors and generators?
78. How laws of magnetism are applied to electrical rotating machinery?
79. Basic components functions in electrical/electronic circuits?
80. Electrical characteristics of batteries, their types and structure?

81. Operating principles of electron tubes?
82. The electrical characteristics of AC series parallel and DC series parallel circuits?
83. The function and principles of basic digital computers?
84. The function and principles of solid state devices?
85. The function and principles of transistor circuits?
86. The function and principles of basic and special circuits?
87. The function and principles of transmission lines?
88. The function and principles of magnetic amplifiers?
89. The function and principles of modular and micro electronic circuits?
90. Trouble shooting symptom recognition?
91. Use of trouble shooting charts/tables?
92. Characteristics of VLF - very low frequency, 10-30 Kh?
93. Characteristics of LF - low frequency, 30-300 Kh?
94. Characteristics of MF - medium frequency, 300-3000 Kh?
95. Characteristics of HF - high frequency, 3-30 Mh?
96. Characteristics of VHF - very high frequency, 30-300 Mh?
97. Characteristics of UHF - ultra high frequency, 300-3000 Mh?
98. Characteristics of SHF - super high frequency, 3000-30,000 Mh?
99. Characteristics of EHF - extremely high frequency, 30,000-300,000 Mh?
100. Basic principles of receiver AN/SRR 11?
101. Basic principles of receiver AN/SRR 12?
102. Basic principles of receiver AN/SRR 13/13A?
103. Basic principles of RF amplifier 30D7/URT?
104. Digital readout electronic counter AN/USM 207?
105. Digital readout electronic counter CP 814/USM 207?
106. Radio frequency counter O-1267/USM 207?
107. Electronic frequency converter CV 1921/USM 207?
108. Basic principles of AM 3007/URT RF amplifier?
109. Basic principles of T 827/URT Transmitter (exciter)?
110. Basic principles of R 1051/URR receiver?
111. Basic principles of CU 937/UR antenna coupler?
112. Basic principles of Interconnection box J-1265/U?
113. Basic principles of AN/SRC 20 radio set?

114. Basic principles of AN/URC-9 radio set?
115. Basic principles of AN SPS-10 modulator?
116. Basic principles of AN SPS-10 25-50V positive trigger pulse?
117. Basic principles of AN SPS-10 50 ohm termination?
118. Basic principles of AN SPS-10 750 ohm termination?
119. Basic principles of AN SPS-10 180 volt negative pulse (external sync)?
120. Basic principles and function of radar indicators?
121. Basic principles and function of electronic recognition and identification equipment?
122. Basic principles and function of radio and transmitting equipment?
123. Basic principles and function of teletype terminal equipment?
124. Basic principles and function of antenna couplers?
125. Basic principles and function of remote control patching systems?
126. Basic principles and function of waveguides?
127. Basic principles and function of klystrons?
128. Basic principles and function of crystal mixers?
129. Basic principles and function of semi-conductors?
130. The types of information found in maintenance publications?
131. The types of information found in technical publications?
132. The procedures for turning in repairables?
133. The maintenance standards books?
134. The performance standards sheets?

Turn to Part D, Page 195.

FIRE CONTROL TECHNICIAN (FT)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, and notice files.

FIRE CONTROL TECHNICIAN TASKS

Operations

95. Operate fire control systems for weapons systems tests.
96. Read dials on weapons control equipment.
97. Set operating controls to predetermined values on weapons control equipment.
98. Perform data transmission checks to weapons control equipment.
99. Test all readiness equipment and operate all missile test equipment.

Turn to the next page of your Response Packet.

Maintenance

1. Using lubrication instructions, lubricate weapons equipment.
2. Test weapons equipment for continuity.
3. Test weapons equipment for grounds.
4. Test weapons equipment for shorts.

5. Clean motors and generators.
6. Clean commutator and slipring assemblies.
7. Replace brushes on motors and generators.
8. Select and use common hand tools used with weapons system.
9. Select and use special tools used with weapons system.
10. Wire wrap terminal boards using wire wrap tool.
11. Use printed circuit techniques to perform module repairs.

Fire Control and Three Coordinate Search Radars

12. Make operator checks to terrier radar.
13. Make operator checks to talos radar.
14. Make operator checks to tarter radar.
15. Make operator checks to basic point defense radar.

Analog Computers and Servo Loops

16. Prepare computer for operation of weapons system.
17. Test and align syncros and resolvers.
18. Zero syncros and resolvers.

Digital Computers and Peripheral Equipment

19. Load target library programs.
20. Load tactical programs.
21. Load maintenance programs.
22. Compose computer for all modes of operation.

Weapon Direction and Target Designation Systems

23. Operate weapon direction systems.
24. Operate target designation systems.
25. Perform operator's tests and adjustments on weapon direction equipment.
26. Perform operator's tests and adjustments on target designation systems.

Test Equipment

27. Use test equipment to measure voltage.
28. Use test equipment to measure current.
29. Use test equipment to measure resistance.

Administration

30. Prepare equipment and component trouble reports.
31. Prepare equipment and component failure reports.
32. Use Electronic Interim Maintenance Bulletin 970 series (EIMB).

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

FIRE CONTROL TECHNICIAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. The theory of AC/DC electricity?
69. The theory of magnetism?
70. The theory of electronic circuit parts, functions, and characteristics?
71. The principles of electromagnetic induction as used in transformers?
72. The principles of electromagnetic induction as used in motors?
73. The principles of electromagnetic induction as used in generators?
74. The principles of operation of synchros?
75. The principles of operation of servosystems?
76. The principles of operation of rectifiers?
77. The principles of operation of filters?
78. The principles of operation of regulators in power supply circuits?
79. The principles of operation of detectors?
80. The principles of operation of amplifiers?
81. The principles of operation of oscillators?

82. The principles of operation of detecting circuits?
83. The principles of operation of mixing circuits?
84. The principles of operation of frequency conversion circuits?
85. The principles of operation of coupling circuits?
86. The principles and applications of saturable core reactors?
87. The principles and applications of magnetic amplifiers?
88. The principles and applications of analog circuit components?
89. The principles and applications of digital circuit components?
90. The principles and applications of inertial guidance devices?
91. The principles and applications of radar?
92. The principles and uses of basic radar circuitry for TE (terrier)?
93. The principles and uses of basic radar circuitry for TR (tarter)?
94. The principles and uses of basic radar circuitry for TA (talos)?
95. The principles and uses of basic radar circuitry for BPD (basic point defense)?
96. How to prepare computer for all modes of weapon system operation (TE)?
97. How to prepare computer for all modes of weapon system operation (TR)?
98. How to prepare computer for all modes of weapon system operation (TA)?
99. The principles and applications of electrical measuring devices?
100. The standard symbols used in weapons system equipment electric diagrams?
101. The standard symbols used in weapons system equipment electronic diagrams?
102. The standard symbols used in weapons system equipment mechanical diagrams?
103. The standard symbols used in basic elements of weapons?
104. Fire control problems associated with air attack?
105. Fire control problems associated with surface attack?
106. Fire control problems associated with underwater attack?
107. Fire control problems associated with ballistic missile attack?
108. The purpose and principles of basic fire control computing devices?
109. The quantities and symbols in weapons systems?
110. The function and operation of fire control subsystems?
111. Military Standards used in identifying and testing resistors?

112. Military Standards used in identifying and testing capacitors?
113. Military Standards used in identifying and testing solid state devices?
114. Military Standards used in identifying and testing electric circuits?
115. The circuit loading effects of test equipment?
116. Military Standards used in identifying and testing electronic circuits?
117. Military Standards used in identifying and testing transformers?
118. Soldering materials, methods, and techniques used in maintenance and repair of resistors?
119. Soldering materials, methods, and techniques used in maintenance and repair of coils?
120. Soldering materials, methods, and techniques used in maintenance and repair of transformers?
121. Soldering materials, methods, and techniques used in maintenance and repair of capacitors?
122. Soldering materials, methods, and techniques used in maintenance and repair of electron tube sockets?
123. Soldering materials, methods, and techniques used in maintenance and repair of solid state devices used in electronic weapon control equipment?
124. Purpose of receiver sensitivity checks?
125. Purpose of standing wave ratio checks?
126. Purpose of transmitted power checks?
127. Purpose of beacon frequency checks?
128. Purpose of spectrum analysis checks?
129. Principles of analog computers?
130. Principles of basic digital computer?
131. Principles and applications of digital analog and analog digital conversion?
132. Basic digital logic?
133. Numbering and conversion systems for octal numbering system?
134. Numbering and conversion systems for decimal numbering system?
135. Numbering and conversion systems for binary numbering system?
136. Principles of input/output devices?
137. Properties of free gyros?
138. Properties of restrained gyros?
139. Purpose of damping gyros?

- 140. Methods used to measure operator and range finder errors?
- 141. Methods used to compute corrections of A&B curves?
- 142. Principles of Stereo Range Finders?
- 143. AN nomenclature system for identifying electronic systems?
- 144. The indicator letter system for identifying components?
- 145. Modular location identification by the numbering system?
- 146. Procedures for turn-in of repairables for packing?
- 147. Procedures for turn-in of repairables for protecting?
- 148. Procedures for turn-in of repairables for processing?
- 149. Procedures for turn-in of repairables for documentation?

Turn to Part D, Page 195.

GUNNER'S MATE (GM)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.).
86. Turn on ship's lights (standing, running).
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

GUNNER'S MATE TASKS

95. Use casualty analysis equipment.
96. Work with electric/electronic circuits.
97. Perform strike-up and strike-down operations.
98. Exercise safety precautions when handling and stowing ammunition and pyrotechnics.
99. Observe safety when conducting missile inspections and sprinkler tests.

Turn to the next page of your Response Packet.

1. Observe nuclear safety precautions.
2. Inspect equipment for unsafe conditions.

Guns, Mounts, and Turrets

3. Operate gauges and test equipment.
4. Operate ammunition hoists and associated handling equipment.

5. Overhaul and repair breech mechanisms.
6. Check differential piston protrusions.
7. Check accuracy of train and elevation indicators.
8. Prepare guns, mounts, and associated equipment for firing.

Missiles and Missile Launching Equipment

9. Attach wings and fins to missile body.
10. Mate and unmate missiles.
11. Make operational tests of missile handling equipment.
12. Check accuracy of train and elevation indicators.
13. Make Daily Systems Operational Tests (DSOT)

Ordnance and Magazines

14. Inspect magazine areas and record magazine temperatures.
15. Test operate magazine sprinkler systems.

Small Arms and Landing Party Equipment

16. Stow pyrotechnics.
17. Stow and issue small arms.
18. Assemble, issue and demonstrate use of landing party equipment.
19. Maintain line-throwing guns.
20. Maintain hand guns, carbines, submachine guns, and rifles.

Electricity and Electronics

21. Clean electrical contacts and switches.
22. Make mechanical/electrical connections.
23. Solder/crimp electrical connections.
24. Repair cables and cable connectors.
25. Locate and correct blown fuses or tripped circuit breakers.
26. Perform tests for continuity, short circuits, grounds or continuity between electrical/electronic equipment.
27. Troubleshoot electric/electronic equipment failures.

Hydraulics and Pneumatics

28. Inspect and service hydraulic reservoirs.
29. Service and test hydraulic functions of ordnance equipment.
30. Use test casting to check sprinkler systems.
31. Work with compressed air systems.

Mechanics

32. Inspect and service ammo handling equipment.
33. Inspect and service sealing surfaces, mating areas and threads.
34. Inspect and service fastening hardware and seals.
35. Operate nuclear weapons handling equipment.
36. Inspect and service electrohydraulic elevators.
37. Inspect and service electromechanical elevators.

Drawings and Sketches

38. Locate and identify system components/subassemblies on drawings or diagrams.
39. Use schematics to trace electrical/electronic circuits.
40. Use diagrams/drawings to trace pressure (hydraulic, air) circuits.
41. Package/unpackage nuclear weapons and components.
42. Interpret markings on containers.
43. Operate test equipment for assembly/strike preparation.
44. Make storage monitoring tests.
45. Disassemble, test, assemble weapons and components.

Administration

46. Maintain department files/publications.
47. Maintain consumable supplies and obtain replacements.
48. Prepare and maintain equipment maintenance record cards.

Continue on next page with Part C — Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

GUNNER'S MATE KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. The electromagnetic radiation precautions for ordnance personnel?
69. The requirements of the two man rule?
70. Gun station responsibilities?
71. The function and principles of gun assemblies, subassemblies and parts?
72. The reference sources for parts nomenclature?
73. The methods of setting mechanical fuses?
74. Principles, functions, and characteristics of missiles?
75. Types and characteristics of missile guidance systems?
76. Types of missile warheads?
77. Classification of missile propellants?
78. Safety and arming devices of missiles and missile warheads?
79. Types of missile launching systems aboard other ships?
80. Components of missile launching systems?

81. Types and functions of missile handling equipment?
82. Methods of jettisoning dud missiles?
83. Duties of missile-launching stations?
84. Principles of missile flight control?
85. Ballistics and fire control variables?
86. Procedures for handling and stowing ordnance?
87. Characteristics of magazine sprinkler systems?
88. Characteristics and classification of explosives?
89. Color coding of ammunition?
90. Types and uses of pyrotechnics?
91. Types and use of relative-humidity indicators?
92. Built-in firefighting equipment in ordnance storage areas?
93. Care and maintenance requirements of landing party equipment?
94. How to use hand grenades?
95. Types and function of electrical/electronic circuit protective devices?
96. Principles of magnetism, FMF and the application to motors and generators?
97. Weapons control circuits using switches, relays and solenoids?
98. Functions of electronic circuit components?
99. The principles and uses of pressure gauges?
100. Physical properties of liquids?
101. Physical properties of gasses?
102. Principles of pneumatics?
103. Principles of hydraulics?
104. Types and uses of pipes, fittings, seals and gaskets?
105. Types and uses of hydraulic fluids?
106. Types and uses of torquing tools?
107. Uses of blueprints and schematic diagrams?
108. Symbols used in ordnance functions?
109. The primary and secondary effects of nuclear explosions?
110. Principles of fission and fusion reactions?
111. Types and symptoms of radiation exposure?

- 112. Relationships of nuclear weapon components and launching platforms?
- 113. Cleaning solutions, lubricants and preservatives used in the maintenance of nuclear weapons?
- 114. Effects of humidity, temperature, violent handling and storage time on nuclear weapons?
- 115. Organization of the weapons department?

Turn to Part D, Page 195.

OPERATIONS SPECIALIST (OS)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

OPERATION'S SPECIALIST TASKS

Detection Equipment

95. Start and stop remote radar repeaters.
96. Operate and adjust remote radar repeaters.
97. Start and stop surveillance and altitude determining equipments including ECCM.
98. Tune altitude and surveillance radar.
99. Operate altitude and surveillance radar.

Turn to next page of your Response Packet.

Interpretation

1. Distinguish radar contacts caused by ships and aircraft.
2. Distinguish radar contacts caused by land, weather and analogous propagation.
3. Determine range, bearing and identify IFF signals.

4. Recognize jamming from periscope presentations.

Communications

5. Start and stop remote controlled transmitter units used for radio and telephone communications.
6. Operate remote controlled transmitters for radiophone communication.
7. Authenticate on radio and telephone circuits.
8. Locate and identify units and component parts of radar and ECCM equipments.
9. Inspect indicator lamps and fuses and replace as necessary.

Navigation and Plotting

10. Solve maneuvering board problems for Course.
11. Solve maneuvering board problems for Speed.
12. Solve maneuvering board problems for CPA.
13. Operate Dead Reckoning Tracer (DRT) including inputting latitude, longitude, and scale adjustments.
14. Maintain at least three continuous tracks on geographic or summary plots.
15. Convert latitude and longitude positions to grid coordinates.
16. Maintain status boards.
17. Establish ship's position by range and bearing from navigation aids on charts.
18. Set up screens and formations in accordance with operational orders and navigation publications.
19. Calculate set and drift.
20. Determine advance and transfer.
21. Use DRT during "Man Overboard."

Publications

22. Locate information in tactical publications and operations orders.
23. Encode signals.
24. Decode signals.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

OPERATION'S SPECIALIST KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. Radar search procedures?
69. Definitions of terms in surface formations, screening and general maneuvering?
70. Information to be gained from nautical charts, including topography, depth, and variation?
71. Employment capabilities and limitations of surface and altitude determining radar?
72. Employment capabilities and limitations of IFF and associated equipments?
73. Effects and use of Electronic Warfare Support Measures?
74. Effects and use of Electronic Counter Measures?
75. Effects and use of Electronic Counter-Counter Measures?
76. External communications procedures during Antiair Warfare?
77. External communication procedures during Antisubmarine Warfare?
78. External communication procedures during normal steaming?

- 79. Security requirements of interior communications?
- 80. Some security requirements of external communications?
- 81. Procedures for packaging turn-in repairables?
- 82. Procedures for protecting and processing turn-in repairs?
- 83. Documentation of turn-in repair items?

Turn to Part D, Page 195.

PERSONNELMAN (PN)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

PERSONNELMAN TASKS

General Office Procedures

95. Handle intra-office routing.
96. Procure office supplies.
97. Make routing adjustments and minor repairs to duplicating machines and typewriters.
98. Serve as office receptionist.
99. Maintain publications pertinent to personnel office.

Turn to the next page of your Response Packet.

1. Maintain file of current directives.
2. Maintain personnel record files.

Personnel Office Routine

3. Compute leave balance.
4. Prepare leave papers.

5. Prepare identification cards.
6. Prepare meal passes.
7. Prepare applications for dependents' ID cards.
8. Prepare ration count reports.
9. Prepare muster reports.
10. Prepare record of emergency data.
11. Prepare enlisted Diary entries.
12. Request for Statement of Service.
13. Request for Transfer to Fleet Reserve.
14. Make entries of leave taken on page 8.
15. Prepare applications for medals and awards.
16. Prepare Duty Preference Cards.

Receipts

17. Compare records and accounts with STO (Standard Transfer Orders).
18. Verify service record.
19. Complete receipt section of Page 12.
20. Enter leave taken en route on page 8.
21. Endorse Standard Transfer Orders.
22. Arrange for liquidation of travel claims.
23. Ensure member is in possession of ID card and ID tags.
24. Verify record of emergency data.
25. Prepare check-in sheet.

Transfers

26. Prepare Check-out sheet.
27. Arrange for physical examination, if necessary.
28. Verify Service Record.
29. Ensure that Leave Record is up to date.
30. Prepare appropriate documents for any special pay due.
31. Prepare Standard Transfer Orders and forward copies as appropriate.
32. Arrange for payment of personnel.
33. Prepare memorandum to disbursing officer authorizing transfer of Pay Record.
34. Terminate commuted rations and other allowances.

Separation

35. Conduct pre-processing interview.

36. Instruct personnel about claims for transportation of dependents.
37. Prepare notice to previous employer.
38. Ensure personnel execute Reemployment Rights Form
39. Close out Enlisted Service Record.
40. Prepare Separation Orders.

Pay and Allowances

41. Prepare documents required for adjustment of pay entry base date.
42. Prepare applications for BAQ (Basic Allowances for Quarters).
43. Prepare applications for Commuted Rations.
44. Prepare applications for Family Separation Allowance.
45. Prepare documents required for Hazardous Duty Pay.
46. Prepare documents required for Sea/Foreign Duty Pay.
47. Prepare documents required for Proficiency Pay.

Education, Training, and Advancement

48. Conduct educational counselling interviews.
49. Prepare requests for Academic Accreditation.
50. Prepare requests for USAFI (United States Armed Forces Institute) enrollment.
51. Prepare entries for record of course completion on page 4.
52. Order Navy training courses.
53. Grade course assignments.
54. Prepare requests for service schools.
55. Determine eligibility for advancement.
56. Order advancement examinations.
57. Prepare advancement worksheets.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series---Security Manual for Classified Information?

PERSONNELMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. Proper English grammar and punctuation?
69. Navy Filing System?
70. Meaning of Digit System used in officer designators?
71. Officer and enlisted pay grades?
72. Rank and rating abbreviations?
73. Types of Navy tests?
74. Uses of Navy tests?
75. Scoring Navy tests?
76. Handling of Navy tests?
77. Location of Naval District Headquarters?
78. General geographic areas of Naval Districts?
79. Regulations concerning permanent change of station transfer?
80. Regulations concerning temporary duty?

81. Regulations concerning temporary additional duty?
82. Regulations concerning leave and liberty?
83. Regulations concerning travel?
84. Regulations concerning advancement in rate/rating?
85. Regulations concerning reduction in rate/rating?
86. Regulations concerning change in rate/rating?
87. Regulations concerning enlisted basic pay?
88. Regulations concerning allowance entitlements?
89. Regulations concerning JUMPS (Joint Unified Military Pay System)?

Turn to Part D, Page 195.

QUARTERMASTER (QM)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

QUARTERMASTER TASKS

Navigation and Related Equipment

95. Act as a recorder for navigation team.
96. Act as a member of a navigation team.
97. Compute Index Correction (IC) for sextant.
98. Lay off courses and bearings using a drafting machine (Parallel Protractor).
99. Determine the visibility of a navigational light.

Turn to the next page of your Response Packet.

1. Determine boundaries between international and inland waters.
2. Read and interpret grid coordinates.
3. Use the Military Grid Reference System.
4. Prepare an overlay.
5. Prepare a small area plotting sheet.

6. Determine Dead Reckoning (DR) positions.
7. Determine ship's speed by using (DR) plots.
8. Determine ship's position by visual observation.
9. Determine ship's position by Loran A.
10. Determine ship's position by radar.
11. Determine ship's position by a celestial fix.
12. Obtain a running fix.
13. Select landmarks for use in obtaining lines of position (LOP).
14. Take horizontal angles by sextant.
15. Compute altitude correction for refraction, dip, parallax or semidiameter.
16. Compute and/or determine Local Hour Angle (LHA), Sidereal Hour Angle (SHA), Greenwich Hour Angle (GHA), Meridian Angle (t) or Local Apparent Noon (LAN).
17. Use Sight Reduction Tables for Air Navigation (H.O. 249), to determine ship's position.
18. Use a Star Finder (H.O. 2102-D).
19. Compute a celestial sight problem using H.O. 214 and the Nautical Almanac.
20. Compute azimuth of sun using H.O. 214.
21. Determine set and drift of tide.
22. Compute height of tide.
23. Compute sunrise and sunset using the tide tables.

Weather

24. Convert fahrenheit to centigrade or vice versa.
25. Compute dewpoint.
26. Determine corrections for the mercurial barometer for height above sea level, gravity or temperature.
27. Determine wind speed using the Beaufort Wind Scale.
28. Determine true wind direction and speed from apparent relative wind direction and speed.
29. Make up a numerical code weather message.

Communications

30. Send and receive by flashing light.
31. Send and receive by semaphore.
32. Send and receive by flaghoist.
33. Send and receive by voice radio.
34. Log flaghoist signals.

Honors and Ceremonies

35. Render honors to passing ships and boats.
36. Dress ship.
37. Full dress ship.

Steering

38. Shift steering control to and from after steering.
39. Shift steering control to and from emergency steering.

Degaussing

40. Energize degaussing equipment.
41. Apply corrections to degaussing coils due to course changes.

Watchstanding

42. Make entries in Quartermaster Notebook.
43. Make entries in Weather Observation Sheet.
44. Test operating equipment on bridge prior to getting underway.
45. Solve maneuvering board problems for Closest Point of Approach (CPA).
46. Solve maneuvering board problems for true and apparent wind directions.
47. Solve maneuvering board problems for change of station situations.
48. Plot ships in formation using maneuvering board.

Time and Timepieces

49. Wind, set and adjust timing rate of ship's clocks.
50. Make entries in Ship's Clock Log.
51. Receive, transport, wind and determine error of ship's chronometer.
52. Record entries in the Navigational Timepiece Rate Book (NAVSHIPS 9846/2).
53. Compute sunrise and sunset using the Nautical Almanac.
54. Compute moonrise and moonset using the Nautical Almanac.

Administrative Duties

55. Determine ship's allowance for charts.
 56. Determine charts required for extended deployments.
 57. Make corrections to nautical charts and publications.
 58. Prepare a Chart Correction Card (Form NAVOCEANO 5610/2)
 59. Stow navigational charts.
 60. Order charts and publications from appropriate issuing office.
 61. Prepare messages in proper format for incoming/outgoing message.
- Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

QUARTERMASTER KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. International Rules of the Road for lights, sound signals, meeting, crossing, overtaking and distress signals?
69. Inland Rules of the Road for lights, sound signals, crossing, overtaking and distress signals?
70. International and Inland Rules of the Road for meaning of the General Prudential Rule and the Rule of Good Seamanship?
71. Flag and pennant nomenclature?
72. Care and maintenance of flags and pennants?
73. Requirements for Side Honors?
74. Bugle signals used for passing/side honors?
75. Whistle signals used for passing/side honors?
76. Number of guns required for gun salutes?
77. Honors required for officers of the Armed Forces?
78. Honors for civil officials of the U. S. and Foreign Dignitaries?
79. Proper procedures for displaying flags and pennants?

80. Types of buoys used in U. S. Buoyage System?
 81. Navigational light characteristics?
 82. Storm warning signals?
 83. Clouds by type and formation?
 84. Difference between Allied and International flaghoist procedures?
 85. Difference between Mercator Projection and Gnomonic Projection?
 86. Usage of general sailing and coastal charts?
 87. Naval Oceanographic Office Chart Numbering System?
 88. Difference between solar, sidereal, and lunar time?
 89. Standard navigation symbols?
 90. Advantages and disadvantages of Loran A for navigation?
 91. Advantages and disadvantages of radar for navigation?
- Turn to Part D, Page 195.

RADIOMAN (RM)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.).
86. Turn on ship's lights (standing, running).
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

RADIOMAN TASKS

Message Center Duties

95. Check incoming messages.
96. Service incoming messages.
97. Determine internal routing of incoming messages.
98. Type smooth copy of incoming messages.
99. Reproduce/distribute smooth copy.

Turn to the next page of your Response Packet.

1. File incoming message copy.
2. Check outgoing messages.
3. Verify proper release.
4. Service outgoing messages.

5. Record time of delivery (TOD).
6. Deliver outgoing messages to cryptocenter.
7. Determine internal routing of outgoing messages.
8. Reproduce/distribute outgoing messages.
9. File outgoing message copy.
10. Deliver outgoing message to Radio Central.
11. Initiate tracer messages.

Radio Central Duties

12. Log incoming messages.
13. Check incoming messages for completeness and accuracy.
14. Note/report discrepancies to supervisor.
15. Check for duplicate messages.
16. Check precedence for internal distribution action.
17. Deliver incoming messages to message center.
18. Receive outgoing messages for transmission.
19. Check security classification.
20. Check for completeness and accuracy.
21. Check precedence for transmission sequence.
22. Assign Date Time Group (DTG).
23. Log outgoing messages.
24. Assign relay instructions.
25. Assign routing indicators.
26. Prepare and/or check outgoing message tapes.
27. Assign channel numbers.
28. Transmit messages.
29. Read punched paper tape.
30. Process tracer messages.
31. Maintain equipment status board.
32. Maintain circuit logs.
33. Man a radio telephone circuit.
34. Man a radio telegraph circuit.
35. Man a radio teletype circuit.
36. Detect electronic jamming.

37. Identify/report jamming.
38. Use antijamming procedures.
39. Use plaindress procedures.
40. Use abbreviated procedures.
41. Use codress procedures.
42. Use call signs.
43. Use address groups.
44. Use address indicating groups.
45. Use prosigns.
46. Use routing indicators.
47. Use prowords.
48. Use operating signals.
49. Use call sign cypher devices.

System Configuration--Equipment Tuning

50. Tune transmitters.
51. Use dummy antenna.
52. Tune receivers.
53. Use frequency meter.
54. Tune transceivers.
55. Use antenna patch panels.
56. Select antenna matching equipment.
57. Set up multichannel system for fleet broadcast.
58. Set up entire radiotelephone system.
59. Set up entire radiotelegraph system.
60. Set up entire teletypewriter system.

Communications Equipment Maintenance

61. Identify and maintain antennas.
62. Repair headsets.
63. Repair microphones.
64. Repair jack boxes.
65. Replace bad indicator lamps.
66. Replace bad electron tubes.
67. Replace bad fuses.

68. Replace bad switches.
69. Replace bad jacks.
70. Replace bad jack boxes.
71. Use equipment indicators for fault detection/isolation.
72. Use schematic diagrams.
73. Use block diagrams.
74. Perform minor maintenance on typewriters.
75. Perform minor maintenance on teletypewriters.

Administration

76. Procure communications publications.
 77. Maintain communications publications.
 78. Destruct communications publications.
 79. Maintain letter correspondence files.
 80. Maintain general files.
 81. Maintain cryptocenter files.
 82. Prepare destruction reports.
 83. Prepare frequency usage report.
 84. Prepare encrypted traffic report.
 85. Prepare harmful interference report.
 86. Prepare jamming and deception report.
 87. Prepare commercial traffic report.
 88. Prepare electronic equipment allowance list.
 89. Use the SRS (commercial traffic) log.
 90. Use the frequency usage log.
 91. Use the encrypted traffic log.
 92. Use the circuit outage log.
- Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

RADIOMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. How to rescue a person unconscious from electrical shock?
69. First aid treatment for shock on chemical burns?
70. Safety precautions in working with electronic equipment?
71. Proper procedures to handle radioactive, cathode ray, fluorescent tubes?
72. The location of safety publications and bulletins?
73. The regulations pertaining to Navy, Joint and Allied communications procedures?
74. The forms, types, classes and construction of naval messages?
75. The significance of message precedence assignment?
76. International radio procedures?
77. Regulations pertaining to toll messages?
78. Purpose and use of service messages?
79. Purpose and use of AUTODIN, AUTOVON, AUTOSERVCOM, NORATS and SATCOM?

80. How to receive fleet broadcasts by frequency and space diversity?
81. Common electrical and electronic terms such as: volt, ohm, ampere, frequency, phase, hertz?
82. Meaning of antenna, loading, tuning, zero beating, audio band pass, IF band pass?
83. Relationships and method of determining voltage, resistance, current, impedance?
84. Types and functions of transmitters, receivers, and terminal equipment?
85. Purpose and use of equipment controls?
86. Tuning procedures for receivers and transmitters?
87. Proper maintenance procedures for antennas?
88. Equipment performance quality monitoring techniques?
89. The proper use of authentication procedures?
90. How to prepare and/or interpret message headings?
91. How crypto devices are incorporated into a system?
92. The regulations pertaining to the use of the Visitor's Log?
93. The regulations pertaining to the use of the Secret and/or Top Secret Log?

Turn to Part D, Page 195.

STEWARD (SD)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

STEWARD TASKS

Food Service

95. Set tables for informal dinners.
96. Set tables for formal dinners.
97. Perform duties of pantry/galley steward (draw stores, prepare light food).
98. Perform duties of watch steward (inspect areas, answer calls, etc.).
99. Issue linen for wardroom/staterooms.

Turn to the next page of your Response Packet.

1. Arrange table seating for officers and guests.
2. Serve food to officers and guests.
3. Prepare areas for food service inspection.
4. Set up for cafeteria service.
5. Set up for buffet service.

Food Preparation

6. Prepare menu items using approved recipes.
7. Prepare yeast dough items and dessert items.
8. Prepare meat, poultry, and seafood for cooking.
9. Carve meat and poultry.
10. Prepare soup stock.
11. Use (includes cleaning) electric ranges.
12. Use electric ovens.
13. Use electric griddles.
14. Use deep fat fryers.
15. Use steam-jacketed kettles.
16. Use steamers.
17. Use electric food mixers.
18. Use electric vegetable cutter.
19. Use electric vegetable peeler.
20. Use electric meat chopper.
21. Use electric meat saw.
22. Use electric meat slicer.
23. Use meat tenderizing machine.
24. Use refrigerators/freezers.
25. Use coffee urns.
26. Use iced tea dispenser.
27. Use electric toaster.
28. Use milk dispenser.
29. Use steam table.
30. Use dishwashing machine.
31. Use a food-preparation worksheet.
32. Adjust recipe ingredient quantities.
33. Convert ounces/decimal units/fractions/percentages.
34. Draw food from storage.
35. Use a meat thermometer.
36. Thaw and prepare frozen foods.
37. Prepare sandwiches.
38. Prepare various fruit/milk drinks

Food Storage

39. Stow perishable and dry substance food items.
40. Inspect food purchases for quality/quantity.
41. Inspect stores for spoilage (age, bacteria, insects, etc.).
42. Store/breakout semiperishable food items.
43. Store/breakout perishable food items.

Administration

44. Prepare notes using common mess and supply terms.
45. Prepare requisitions and purchase orders.
46. Maintain department or division records.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

STEWARD KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. Safety procedures when using electrically powered food preparation equipment?
69. Proper handling and use of food preparation tools and utensils?
70. Particular safety regulations concerning use and cleaning of deep fat fryer?
71. Regulations concerning sanitizing wardroom mess gear?
72. Symptoms of malfunctioning food preparation equipment?
73. Procedures for reporting faulty equipment?
74. Decontamination procedures applicable to nuclear, biological, chemical attack?
75. Food conservation practices?
76. Standard food preparation terms?
77. Handling, thawing and preparing procedures for frozen food items?
78. Basic classes of food (milk, meat, etc.)?
79. Sources of nutrients in the diet?

80. Procedures for cooking small quantities of food?
 81. Sanitation procedures and sterilization temperatures for using and cleaning food service equipment?
 82. Types of food-borne illnesses and preventive measures?
 83. Methods and materials used in insect and rodent control?
 84. Sanitation procedures applicable to the dining area?
 85. Proper operation of scullery equipment?
 86. Holding temperatures and time limits for keeping cooked food products?
 87. Temperatures and humidity ranges for storage of subsistence items?
 88. Regulations governing withdrawal of foodstuffs from refrigerated spaces?
 89. Regulations governing withdrawal of foodstuffs from bulk storerooms and issue rooms?
 90. Characteristics of spoiled food and procedures for disposal?
 91. How to identify overage subsistence items?
 92. Standard units of issue for subsistence items?
 93. The sources for procurement of food?
 94. How subsistence controls function?
 95. Stacking procedures for storage of various subsistence items?
 96. Procedures for defrosting refrigeration units?
 97. Procedures for reporting faulty refrigeration or air circulation equipment?
 98. General organization of the officer's mess and the afloat supply department?
 99. Cash handling procedures?
 100. Regulations, methods and procedures for taking inventories?
 101. Quantity of non-foodstuff (dishes, linens, etc.) to be maintained aboard your ship?
 102. Records and reports for messes afloat?
- Turn to Part D, Page 195.

SHIP'S SERVICEMAN (SH)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

SHIP'S SERVICEMAN TASKS

Administration

95. Prepare ship's store returns.
96. Prepare balance sheet and operating statements.
97. Prepare receipt and expenditure documents.
98. Prepare documents for transfer of store profits.
99. Prepare standard Navy correspondence.

Turn to the next page of your Response Packet.

1. Maintain incoming and outgoing mail logs.
2. Maintain files, manuals, and stock catalogs.
3. Interpret appropriation codes and symbols.

Ship's Store Merchandise Procurement

4. Determine type and amount of merchandise to order.
5. Prepare special orders for items not stocked.

6. Procure merchandise by requisition.
7. Procure merchandise by transfer.
8. Procure merchandise by purchase.
9. Procure equipment and commercial services.
10. Maintain requisition logs and files.
11. Prepare dealer's bills for payment.

Receipt, Stowage, and Inventory Control

12. Review dealer's bills on merchandise received.
13. Inspect merchandise received for quantity.
14. Inspect merchandise received for damage.
15. Acknowledge receipt of merchandise.
16. Prepare claims for lost or damaged merchandise.
17. Post receipts to stock and inventory control records.
18. Post and maintain tax-free accounts.
19. Maintain log of numbered car seals.
20. Identify and classify dangerous or safe material.
21. Stow merchandise to prevent damage or pilferage.
22. Perform inventory and stock control functions.
23. Extend inventory for money value.
24. Verify count with stock record cards.
25. Remove stock cards for merchandise no longer carried.
26. Post entries to Financial Control Record.

Resale Activities

27. Operate a retail store.
28. Operate a fountain or ice cream bar.
29. Maintain vending machines.
30. Construct merchandise displays.
31. Prepare retail price change accounts.
32. Prepare over-ring/refund vouchers.
33. Maintain cash receipt and cash register books.

Barber

34. Prepare supply requisitions for barber equipment.
35. Maintain barber shop inventory accounts.
36. Prepare and review instructions for operation of barber shop.

37. Maintain appointment schedule system.
38. Wash, rinse, and dry clipper heads, scissors, and combs.
39. Place combs, clipper heads, and scissors in chemical disinfectants.
40. Oil and perform minor adjustments to electrical barber tools.
41. Hone and strop razors.
42. Cut hair using correct tools.
43. Shave neck.

Laundry and Dry Cleaning

44. Manage laundry room.
45. Manage dry cleaning room.
46. Prepare supply requisition forms.
47. Maintain inventory accounts.
48. Prepare and review instructions for operation of laundry and dry cleaning room.
49. Prepare laundry and dry cleaning schedules.
50. Mark clothing with marking machine or pen marker.
51. Classify and sort clothing.
52. Spot and remove common stains from clothing before washing.
53. Wash clothes in washer using required amount of detergent, bleach, starch, and sour.
54. Dry clothes in dry tumbler.
55. Inspect clothes to determine laundry damage and take corrective action.
56. Press clothes using air operated laundry press, press lays and hand irons.
57. Clean and lubricate machines.
58. Disinfect and sterilize laundry (from sick bay, etc.)
59. Pre-inspect dry cleaning garments for stains and damage.
60. Use correct chemicals to remove stains before dry cleaning.
61. Dry clean garments in machine using solvents and water.
62. Post-inspect garments for stains that were not removed during cleaning process.
63. Inspect garments for damage incurred during cleaning process.
64. Press garments using correct machines.

Tailor

65. Prepare supply requisitions for tailor shop.
66. Maintain tailor shop inventory accounts.

67. Prepare and review instructions for operation of tailor shop.
68. Receive, tag, and log garments.
69. Measure patrons to determine uniform alterations.
70. Perform alterations on uniforms.
71. Make minor repairs on uniforms.
72. Remove old striping from jumpers and sew on new striping.
73. Remove old insignias and fasteners from uniforms and sew on new insignias and fasteners.
74. Remove old gold braid from uniforms and sew on new gold braid.
75. Use proper preservation methods in storage of uniforms and accessories according to climate.
76. Clean, lubricate, make minor adjustments and repairs to sewing machines.
77. Service vending machines.
78. Maintain salesroom and stockroom records.
79. Maintain fountain and vending machines records.
80. Construct merchandise displays.

Continue on next page with Part C — Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series---Security Manual for Classified Information?

SHIP'S SERVICEMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. Safety classifications of material (fire, pressure, etc.)?
69. Sanitary and safety precautions required for your trade?
70. Procedures and safety precautions of the various types of materials-handling?
71. Equipment used in supply work afloat?
72. Safety regulations pertaining to the stowage and care of retail clothing and ship's store stock?
73. Precautions to be taken when stowing materials to allow access to damage control and fire fighting equipment and fitting?
74. Danger of spontaneous combustion and precautions to be taken for its prevention?
75. Regulations governing the sale of stock?
76. Procedures for expending stock by survey?
77. Regulations governing the use of appropriations and funds?
78. Regulations governing responsibility and accountability for stock placed in ship's serviceman's custody?

79. Functional accounts and their uses?
80. Basic arithmetic?
81. The titles and symbols of appropriations and funds?
82. The forms used in stock control and when they are used?
83. The purpose of inventories?
84. How to prepare and maintain stock records?
85. Methods and procedures for taking inventories?
86. The procedure for obtaining supply department material for use/sale in ship's store operation?
87. The purpose and use of ship's store afloat stock catalog, and ship's stores contract bulletins?
88. The methods and sources of procurement for standard and special resale stock for ship's store?
89. The receipt and expenditure entries required in stock and financial records?
90. The procedures for reconciling invoices and balancing stock and financial records?
91. The procedures for initiating procurement action for major equipment?
92. The methods of procuring commercial services?
93. The procedure for establishing accountability for stocks and funds?
94. The procedure for marking resale stock and supplies?
95. The purpose and disposition of receipt documents?
96. The procedures for processing dealers' bills?
97. The retention periods and disposition of files and records for ship's store afloat?
98. The nomenclature, types, and characteristics of supplies common to your trade?
99. Regulations peculiar to your trade?
100. Working principles of machines peculiar to your trade?
101. Application of cost control procedures?
102. The standard of service required in trade?
103. The purpose of price changes?
104. Regulations governing keys?
105. Regulations governing locks?
106. Regulations governing safe combinations?
107. Regulations governing car seals?
108. Regulations outlining emergency entry?

109. Regulations pertaining to accountable spaces?
 110. Regulations pertaining to security of material and records?
 111. Regulations pertaining to security of pilferable stock and supplies?
 112. Organization and functions of supply department afloat?
 113. The regulations governing the computation and establishment of sales prices?
 114. The symptoms of common skin diseases?
 115. The symptoms of common scalp diseases?
 116. The characteristics of head structure and facial features in relation to appropriate haircut?
 117. The types of haircuts authorized by Navy uniform regulations?
 118. The types and textures of hair?
 119. The nomenclature, types, and characteristics of fabrics serviced in performance of own trade?
 120. The effect of heat and cleaning solvent on various fabrics?
 121. The standard washing formulas for various articles, including synthetic fabrics?
 122. How to recognize unusual noises on washers and/or extractors which could damage equipment?
 123. The formulas for washing with salt water?
 124. How to remove stains from the various fabrics?
 125. The effect that various stain removing agents will have on fabrics?
 126. The methods of dry cleaning various clothing?
 127. The methods of deodorizing various clothing?
 128. The methods of pressing and finishing dry cleaned garments?
 129. How to operate mobile laundry equipment?
 130. How to determine the chemicals (hardness) of wash water?
 131. The washing formulas for laundry chemicals?
 132. The authorized insignias?
 133. The authorized alterations?
 134. The special treatments required to alter and mend fabrics?
 135. The Navy uniform regulations pertaining to tailoring of uniforms?
- Turn to Part D, Page 195.

STOREKEEPER (SK)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

STOREKEEPER TASKS

Procurement and Receipt of Materials and Services

95. Determine routine material requirements.
96. Prepare requisition forms.
97. Maintain requisition file.
98. Identify government material using references and mark symbols.
99. Prepare purchase documents.

Turn to the next page of your Response Packet.

1. Act as imprest fund cashier.
2. Prepare contracts to purchase material.
3. Maintain requisition/OPTAR files.
4. Maintain outstanding shipping paper file.
5. Maintain incoming material file.

6. Maintain completed shipping papers file.
7. Verify quantity of receipts.
8. Inspect for damaged material.
9. Receive material for stock.
10. Receive material for direct turn over (DTO).
11. Act as storeroom storekeeper.
12. Maintain a locator system.
13. Stow hazardous materials.
14. Stow valuable materials.
15. Work in a servmart.

Inventory Management

16. Maintain stock record cards for repair parts.
17. Maintain stock record cards for consumables.
18. Maintain stock record cards for food items.
19. Make new cards on FSN change.
20. Review S/M stock record cards.
21. Count and inspect items for inventory.
22. Record inventory on count documents.
23. Prepare inventory reports.
24. Inventory special materials.
25. Inventory controlled equipage.
26. Prepare a deficiency report.
27. Prepare documents and maintain files for repairable items.
28. Use the integrated stock list.
29. Use the demand/frequency of demand list.
30. Use the excess/shortage list.
31. Use the hazardous items list.

Expenditure of Material by Issue, Transfer, Survey

32. Maintain expenditure logs.
33. Maintain an expenditure invoice file.
34. Make issues from stock.
35. Post issues to stock records.
36. Maintain Historical Demand File.
37. Prepare documents for transfer of material.
38. Post transfers to stock records.

39. Prepare value summary transfer reports.
40. Prepare documents to turn material in for credit.
41. Prepare documents to survey material.
42. Verify documents prepared by other departments.
43. Package and/or crate material for shipment.
44. Mark material for identification.

General Administrative

45. Type and route correspondence.
46. File correspondence.
47. Type frequently used forms.
48. Maintain files of frequently used forms.
49. Maintain the principal publications of the department.
50. Identify materials contained in Coordinated Shipboard Alliance.
51. Interpret appropriation symbols.

Continue on next page with Part C — Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

STOREKEEPER KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. The functions and safety precautions of the material and handling equipment used in supply work?
69. The safety regulations pertaining to the stowage and care of equipage, repair parts, and consumables?
70. The precautions to be taken when stowing materials to allow access to damage control and fire fighting equipment and fittings?
71. The danger of spontaneous combustion and how to prevent?
72. The safety precautions pertaining to office spaces and equipment?
73. The sources of Navy appropriations and their relationship to supply accounting and reporting?
74. Types of appropriations and funds and their use and purpose?
75. Titles and symbols of frequently used appropriations, funds, and fund codes?
76. The method of constructing and interpreting fund codes?
77. The supporting documents required in maintaining Operating Target (OPTAR) records and departmental budgets afloat?
78. The elements of the accounting data spread and purpose?

79. How to use the Navy Management Data List?
80. How to use the Master Cross Reference List?
81. How to use the Fleet Issue Load List?
82. The methods and information sources for procurement of equipage?
83. The methods and information sources for procurement of repair parts?
84. The methods and information sources for procurement of consumables?
85. The methods and information sources for procurement of food items?
86. The regulations pertaining to responsibility and accountability for stock placed in storekeeper's custody?
87. The procedures for receiving, inspecting, and stowing materials?
88. The procedures pertaining to material turned in to stores ashore?
89. The procedures for packaging, protecting, processing, and documentation for turn-in of repairables?
90. The purposes and functions of the various stock records?
91. The current procedures on preparing and maintaining stock records?
92. The physical inventory procedures?
93. The documentation of material usage?
94. The cost data on maintenance transactions?
95. The documents prepared in connection with the Shipboard Maintenance Data Collection System?
96. The documents prepared in connection with the Shipboard Afloat Consumption Cost and Effectiveness Surveillance System?
97. The documents required to substantiate the expenditure of stores under cognizance of the supply department?
98. The procedures and programs developed for the management of shelf-life, high value (HIVAL) and classified material?
99. The purpose and use of major components of Automatic Data Processing (ADP) Equipment?
100. The common terms used in Automatic Data Processing?
101. The general duties and responsibilities of key personnel in an Automated Supply Department?
102. The names, purposes, and general content of principal publications used in supply work?
103. The Basic organization and functions of a supply department afloat and ashore?
104. The regulations pertaining to handling combinations and keys to locks to supply department spaces, and security of materials and records?
105. The basic principles of customer relations?

Turn to Part D, Page 195.

SIGNALMAN (SM)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

SIGNALMAN TASKS

Communications

95. Send and receive by flashing light.
96. Send and receive by semaphore.
97. Send and receive by flaghoist.
98. Send and receive by voice radio.
99. Act as a spotter during signalling operations.

Turn to the next page of your Response Packet.

1. Act as small boat signalman.
2. Compose and/or breakdown visual or radio headings in naval form.
3. Make up a flag for breaking.

Honors

4. Dress ship.
5. Full dress ship.

6. Render honors to passing ships and boats.

Watchstanding

7. Make entries in Quartermaster Notebook.
8. Make entries in Weather Observation Sheet.
9. Test operating equipment on bridge prior to getting underway.
10. Solve maneuvering board problems for Closest Point of Approach (CPA).
11. Solve maneuvering board problems for true and apparent wind directions.
12. Solve maneuvering board problems for change of station situations.
13. Plot ships in formation using maneuvering board.

Administrative Duties

14. Maintain visual station files.
15. Maintain publication custody logs.
16. Read and interpret navigational charts.
17. Stow navigational charts.
18. Make corrections to nautical charts and publications.
19. Make corrections and changes to Tactical Publications.
20. Prepare a Chart Correction Card (NAVOCEANO Form 5610/2).
21. Order charts and publications from appropriate issuing activity.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

SIGNALMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. International Rules of the Road for lights, sound signals, meeting, crossing, overtaking and distress signals?
69. Inland Rules of the Road for lights, sound signals, crossing, overtaking and distress signals?
70. International and Inland Rules of the Road for meaning of the General Prudential Rule and the Rule of Good Seamanship?
71. Flag and pennant nomenclature?
72. Care and maintenance of flags and pennants?
73. Requirements for Side Honors?
74. Bugle signals used for passing/side honors?
75. Whistle signals used for passing/side honors?
76. Number of guns required for gun salutes?
77. Honors required for Officers of the Armed Forces?
78. Honors for civil officials of the U. S. and Foreign Dignitaries?
79. Proper procedures for displaying Flags and Pennants?

- 80. Types of buoys used in U. S. Buoyage System?
 - 81. Navigational light characteristics?
 - 82. Storm warning signals?
 - 83. Clouds by type and formation?
 - 84. Difference between Allied and International flaghoist procedures?
- Turn to Part D, Page 195.

SONAR TECHNICIAN (ST)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

SONAR TECHNICIAN TASKS

Bathythermograph

95. Take Bathythermograph readings.
96. Operate/maintain Bathythermograph and associated equipment.
97. Determine effective Sonar range.

Antisubmarine Operations

98. Track a target and determine bearing drift.
99. Operate external filters.

Turn to the next page of your Response Packet.

1. Make tape recordings of contacts.
2. Classify contacts.
3. Determine True and Relative bearings.
4. Determine Range action (opening-closing).

5. Determine Doppler.
6. Determine target aspect.
7. Determine target angle.
8. Determine True and Relative motion.
9. Determine target course.

Maintenance

10. Inspect, clean, and lubricate equipment.
11. Inspect and clean commutators/slipring assemblies.
12. Inspect and replace brushes.
13. Identify electrical characteristics of circuit components.

Administration

14. Locate and identify components and subassemblies by using technical manuals.
15. Record operational data on recorder traces.
16. Maintain Sonar watchstander's logs.

Detection Equipments

17. Operate and adjust sonar equipment during A/S operations.
18. Operate sonar equipment effectively under varying acoustical conditions.
19. Interpret passive sonar recorder traces.
20. Interpret recorder traces to determine bearing rate and drift.
21. Use Sonar Target Simulator.
22. Identify sounds produced by surface ships.
23. Identify sounds produced by torpedoes.
24. Identify sounds produced by snorkeling submarines.
25. Identify sounds produced by evasion devices.
26. Identify sounds produced by own ships equipment.
27. Identify sounds produced by marine life.

Underwater Fire Control Equipment

28. Operate and adjust equipment at UFC station.
29. Read dials on UFC equipment.
30. Set operating controls on UFC equipment to predetermined values.

Communication

31. Send/receive International Morse Code.

32. Operate underwater telephone.
33. Use standard radio telephone phraseology and procedures.
34. Furnish all stations of the Sonar organization with reports for conducting A/S operations.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

SONAR TECHNICIAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. The functions and capabilities of surface sonar equipments?
69. The functions and capabilities of submarine sonar equipments?
70. The functions and capabilities of mine detection equipments?
71. The effects of water phenomena on sonar operation?
72. The characteristics of submarine launched jamming and evasive devices?
73. The effects of jamming devices on sonar operation?
74. Elements of the underwater fire control problem?
75. The variables and constants of underwater ballistics?
76. The principles of underwater fire control symbols?
77. The purpose, principles and adjustment of Underwater Fire Control (UFC) mechanisms?
78. The interpolation and interpretation of all dials?
79. The purposes of transmission, computing, and rate tests?
80. The principles of and requirements for security of communications?

81. The characteristics and functions of communication facilities associated with antisubmarine (A/S) operations?
 82. The description, recognition and classification of A/S contacts?
 83. The description, recognition and classification of surface contacts?
 84. The recognition and classification of jamming devices?
 85. The recognition and classification of torpedoes?
 86. The recognition and classification of active transmission?
 87. The duties of A/S personnel assigned to Underwater Battery Plot?
 88. The duties of A/S personnel assigned to Sonar control?
 89. The duties of A/S personnel assigned to Bridge?
 90. The sonar search procedures?
 91. Submarine maneuvering characteristics?
 92. Methods of construction and interpreting time bearing plots?
 93. Methods of construction and interpreting relative motion (Lynch) plot?
 94. Methods of construction and interpreting sonar navigation (Strip) plot?
 95. Use of A/S publications (NWP-24D, NWP-27A, NWIP-24-1A, FXP-10, ATP-1(A) Vol. 1)?
 96. Meaning of schematic symbols?
 97. Fundamentals of magnetism?
 98. Characteristics of elements used in vacuum tubes?
 99. Characteristics of elements used in transistors?
 100. Function of parts in electrical/electronic circuits?
 101. Precautions used while repairing printed circuit boards?
 102. Methods of calculating current?
 103. Methods of calculating voltage?
 104. Methods of calculating resistance?
 105. Procedures for processing turn-in repairables?
- Turn to Part D, Page 195.

TORPEDOMAN'S MATE (TM)

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.).
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

TORPEDOMAN TASKS

Prefiring - Recovery - Postfiring - Shipping Routines

95. Install accessories in torpedoes.
96. Install or remove weapons components from containers.
97. Install desiccant and packing materials.
98. Secure or release weapons.
99. Serve as a member of the on-loading or off-loading party.

Turn to the next page of your Response Packet.

1. Install internal components.
2. Prepare weapons for checkout.
3. Serve as team member performing receipt and transfer inspections.
4. Perform final close-out checks on weapons.
5. Perform postrun treatment using a check list.

Launching Equipment

6. Locate and identify components and assemblies of torp mounts by reference to drawings and diagrams.
7. Locate and identify components and assemblies of tubes and launchers by reference to drawings and diagrams.
8. Test and maintain torp mounts.
9. Test and maintain torp tubes.
10. Test and maintain torp racks.
11. Perform postfiring maintenance.
12. Operate and fire launchers in normal and casualty modes.
13. Line up hydraulic service to launch equipment.

Electricity - Electronics - Acoustics

14. Operate portable electronic test equipment.
15. Use an American standard wire gauge.
16. Prepare cables for installation into a terminal box.
17. Make standard cable/wire splices.
18. Interpret standard color code markings on electronic components (resistors-capacitors, etc.).
19. Test and charge torpedo storage batteries.
20. Operate test sets issued with torpedo workshop equipment.
21. Select and use proper soldering equipment for electrical/electronic equipment repair.
22. Test and replace plug-in relays and coils.
23. Test multiconductor plugs and receptacles.
24. Repair multiconductor plugs and receptacles.
25. Test and replace module cards, subassemblies and components in electrical equipment.

Drawings and Schematics

26. Use technical publications to locate faulty components within electric/electronic equipment.
27. Trace basic mechanical/electrical circuits on schematics.
28. Make freehand sketches of electrical circuits.
29. Make freehand sketches of mechanical systems.
30. Make freehand sketches of hydraulic systems.
31. Make freehand sketches of pneumatic systems.

Underwater Ordnance Maintenance

32. Inspect, clean, preserve and lubricate launching equipment.
33. Inspect and replace pressure seals.
34. Inspect and replace "O" rings.
35. Inspect and replace packing glands on weapons.
36. Disassemble/reassemble an afterbody.

Magazines

37. Inspect and record temperature of magazines.
38. Conduct Sprinkler System tests.
39. Monitor Air Sampler test set.
40. Perform adjustments on the Air Sampler test set.

Administration

41. Prepare a RUDTORPE form.
42. Inventory tools.
43. Inventory portable test equipment.
44. Maintain consumable supplies.
45. Maintain work logs.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and flourescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

TORPEDOMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. Safety procedures when testing and charging of storage batteries?
69. Theory or application of the laws of magnetism?
70. Methods for calculating voltage, power, resistance, etc.?
71. Types and uses of various gas filled electronic tubes including cathode-ray tubes?
72. Purpose and principles of galvanic cells, batteries, induction-type relays and fuses?
73. Physics of sound, fluids, electricity, heat, inertia and gravity?
74. Theory of AC/DC electricity?
75. Principles of transformers - motors - generators?
76. Electrical/electronic terms and units of measurement?
77. Safety precautions concerning soldering techniques and materials?
78. Types, structure and electrical characteristics of batteries?
79. Identification of cables, cabinets, panels by electrical code markings?

80. Types of insulating materials?
81. Theory and principles of both Free and Rate gyroscopes?
82. Fundamentals of inertial guidance, stabilization, propulsion, and thrust vector control?
83. Characteristics of explosives contained in warheads?
84. Characteristics of explosives contained in boosters?
85. Characteristics of explosives contained in detonators?
86. Characteristics of explosives contained in igniters?
87. Characteristics of explosives contained in missile propellants?
88. Characteristics of explosives contained in primers?
89. Principles of a steam propelled torpedo system?
90. Principles of an acoustically controlled torpedo system?
91. Principles of a wire guided torpedo system?
92. Operational use of launch tube heaters?
93. Assignments to various torp tubes, mounts, and launchers?
94. Principles of a pneumatic launching system?
95. Principles of a hydraulic launching system?
96. Principles of a hydraulic/pneumatic system within various weapons?
97. Blueprint views and projections?
98. Symbols used in mechanical and electrical drawings?
99. Symbols used in hydraulic and pneumatic systems?
100. Symbols used in electronic schematics?
101. Battery heater circuits?
102. Major sections of torpedoes?
103. Types of magazine cooling systems?
104. Types of magazine sprinkler systems?
105. Magazine cooling/sprinkler system/testing procedures?
106. Methods of magazine dewatering?

Turn to Part D, Page 195.

PART B - TASK LIST

(Spaces for your responses are provided on Form B of Response Packet; Task List begins below in this booklet.)

SPECIAL INSTRUCTIONS

This part is divided into three parts in the Response Packet.

The first part is labeled "PARTICIPATION STATUS" which has three possible choices--"Supervise," "Perform," and "Assist."

The second part is labeled "HOW MUCH TIME IS SPENT ON TASK" which has five possible choices--"Very Little," "Below Average," "Average," "Above Average," and "Very Much." "Average" used here indicates time spent on each task in relation to time spent on other tasks.

The third part is labeled "HOW WAS TASK LEARNED" which has four possible choices--"Mostly School Training," "50/50 School and Experience," "Mostly Work Experience," and "Civilian Training and Experience."

If an item is not applicable, do not mark any space for that item, and continue to next item. If the item is applicable, fill in only one space for each of the three parts as appropriate.

When you have completed all the task items in this part, go to the Special Instructions for Part C.

COMMON SEAMAN TASKS

Marlinspike Seamanship

1. Identify lines by use.
2. Identify lines by size/composition.
3. Handle mooring lines on the pier.
4. Handle mooring lines aboard ship.
5. Handle mooring lines on a buoy.
6. Handle lines during replenishment.
7. Handle lines when receiving cargo.
8. Handle lines when receiving fuels.
9. Use a heaving line.
10. Use a leadline.
11. Stow lines/wire.
12. Coil lines.

13. Coil wire.
14. Flake down lines.
15. Flemish lines.
16. Inspect lines for mildew/wear.
17. Splice fiber/manila lines.
18. Splice wire rope.
19. Whip line ends.
20. Worm lines.
21. Parcel lines.
22. Serve lines.
23. Seize/cut wire rope.
24. Clean nylon rope.
25. Install chafing gear on lines/wire.
26. Uncoil fiber rope.
27. Uncoil nylon rope.
28. Uncoil wire rope.
29. Open small line coils.
30. Inspect wire rope.
31. Remove kinks from wire rope.
32. Slush wire rope with preservatives.
33. Clean/lubricate wire rope.
34. Use knots on package or case (bent to itself).
35. Use bends to secure lines together.
36. Use hitches to fasten lines to an object (spar).
37. Measure, cut, and sew canvas or plastic by hand.
38. Measure, cut, and sew canvas or plastic by machine.
39. Repair canvas or plastic articles.
40. Inspect, clean and preserve canvas or plastic cloth.
41. Stow canvas.
42. Measure, cut and sew leather by hand.
43. Measure, cut and sew leather by machine.
44. Inspect, clean and preserve leather.
45. Stow leather.

Rigging

46. Rig life lines.
47. Rig boat booms.
48. Rig fenders.
49. Rig towing gear.
50. Rig for replenishment at sea.
51. Rig for cargo handling.
52. Rig for salvage or rescue operations.
53. Rig stages.
54. Rig bosn's chair.
55. Rig gangways/accommodation ladders.
56. Rig awnings/hatch covers.
57. Rig sea painter.
58. Rig/handle lines for hoisting.
59. Secure rigged equipment.
60. Maintain standing rigging.
61. Mouse hooks and shackles.
62. Stow cargo.
63. Use and maintain fork lifts.
64. Use hand dolly/hand truck.
65. Stow and secure vehicles for transport.
66. Receive and stow ordnance equipment.
67. Man anchor chain locker.

Small Boat Seamanship

68. Act as bow hook on small boat.
69. Act as stern hook on small boat.
70. Act as coxswain on small boat.
71. Act as small boat keeper.

Surface Finishes

72. Prepare and paint steel surfaces.
73. Prepare and paint aluminum surfaces.
74. Prepare and paint fiberglass surfaces.
75. Prepare and paint wooden surfaces.

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76. Paint interior surfaces.
77. Paint exterior surfaces.
78. Use stencil to apply numbers and letters.
79. Mask off areas for painting.
80. Use paint and varnish removers.
81. Lay floor tile.
82. Apply acoustical tile to overheads.
83. Affix formica to prepared surfaces.
84. Man paint locker.
85. Serve as a ship's swimmer (retrieving canisters, rescue, etc.)
86. Turn on ship's lights (standing, running)
87. Act as a line signalman during replenishment at sea.

Administrative Duties

88. Prepare standard Navy correspondence.
89. Prepare supply requisitions.
90. Prepare Returned Material Credit Memoranda (RMCM).
91. Use Navy standard classification codes.
92. Use Maintenance Requirement Cards (MRC).
93. Use Maintenance Action Forms (MAF) (OPNAV 4790-2K).
94. Maintain correspondence, instruction, notice files.

YEOMAN TASKS

General Office Procedures

95. Handle intra-office routing.
96. Procure office supplies.
97. Make routine adjustments and minor repairs to office duplicating machines and typewriters.
98. Serve as office receptionist.
99. Maintain publications.

Turn to the next page of your Response Packet.

1. Maintain file of current directives.
2. Prepare correspondence in accordance with Correspondence Manual.
3. Sort and open incoming mail.
4. Maintain Classified mail log.

5. Maintain file of control clips.
6. Route mail to departments.
7. Researching background material for mail requiring action.
8. Review outgoing mail.
9. Serialize outgoing mail.

Reports

10. Maintain tickler file for required reports.
11. Notify departments when reports are due.

Discipline

12. Prepare NAVPERS 2696 (Report and Disposition of Offense).
13. Prepare DD Form 450 (Charge Sheet).
14. Act as court reporter for special courts martial.
15. Prepare page 13 entries for disciplinary action.
16. Prepare court record memorandum.
17. Maintain Unit Punishment Book.
18. Prepare Charges and Specifications.

Officer's Records

19. Prepare Identification Cards.
20. Prepare Applications for Dependent's ID Cards.
21. Prepare Record of Emergency Data.
22. Prepare Officer's History Cards.
23. Prepare Officer's Preference and Personal Information Cards.
24. Verify and correct Officer Data Cards.
25. Conduct annual verification of Service Records.
26. Prepare Officer's Diary Entries.

Pay and Allowances

27. Prepare Applications for BAQ (Basic Allowance for Quarters).
28. Prepare Applications for FSA (Family Separation Allowances).
29. Prepare Supporting Documents for Payment of Hazardous Duty Pay.

Continue on next page with Part C -- Knowledge Items.

PART C - KNOWLEDGE ITEMS

(Spaces for your responses are provided on Form C of Response Packet.)

SPECIAL INSTRUCTIONS

Below is a list of knowledge items associated with your job. On Form C in the Response Packet are two choices corresponding to this list, "Yes" and "No." If your job aboard this ship requires knowledge of an item, then black out "Yes." If not required, leave item blank and go to the next item.

When you have completed all the knowledge items in this part, go to the Special Instructions for Part D.

COMMON SEAMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

1. The purpose and content of a watch, quarter and station bill?
2. The purpose and procedures for 12 o'clock reports?
3. The general purpose and contents of the Ship's Organization and Regulation Manual?
4. How to identify the major types of ships and aircraft of the U. S. Navy?
5. The correct names for parts of the superstructure, decks and hull?
6. How to locate various compartments or spaces by the lettering and numbering system aboard ships?
7. The qualifications and requirements of the ratings to which seamen may be advanced?
8. The general contents of U. S. Navy Regulations?
9. How to interchange Greenwich Civil Time (GCT) and local standard time?
10. The duties of lookouts?
11. Lookout terminology?
12. The meaning of position angle?
13. The meaning of lookout sector?
14. The meaning of true bearing?
15. The meaning of relative bearing?
16. The difference between bearing by degrees and bearing by points?
17. The difference between magnetic compass and gyrocompass?
18. The general use of emergency signal flags and pennants?
19. The signal for man overboard?

20. The procedure for reporting a man overboard?
21. Policies and procedures for placing personnel on report?
22. The duties of side boys, honor guard?
23. Responsibilities during gun salutes?
24. The proper display and handling of the National Ensign?
25. The orders and procedures for hoisting or lowering boats?
26. The safety precautions when hoisting or lowering boats?
27. The use of stoppers and steadying lines when hoisting or lowering boats?
28. Boat hails, recalls, salutes and etiquette?
29. Boat handling in heavy seas?
30. Procedures for dockside landing?
31. Procedures and equipment used in anchoring or mooring a boat?
32. Safety precautions in operating or riding ship's boats?
33. How to determine burden and privilege for avoiding collisions and overtaking situations?
34. The basic rules of the road?
35. How to revive a person unconscious from electrical shock?
36. First aid treatment for electrical burns?
37. First aid treatment for chemical burns?
38. How to use grounding straps?
39. The use of rubber mats when working with electrical equipment?
40. Safety precautions on energized circuits?
41. Safety precautions on de-energized circuits?
42. Safety precautions in cathode-ray and fluorescent tube handling?
43. Safety precautions when working on or near radar antennas?
44. The safety precautions when operating machinery or power tools?
45. The safety precautions when working aloft or over the side?
46. The safety precautions when handling small arms?
47. The safety precautions when handling heavy weights by hand?
48. The safety precautions when working around weight handling equipment?
49. The procedures for rescuing a person in contact with an energized circuit?
50. Watertight integrity and procedures for setting material conditions?
51. The causes of spontaneous combustion?

52. How to report a fire or other casualty?
53. How each of the four classes of fire is determined?
54. The recommended extinguishing agent for each class of fire?
55. The use of fog or solid stream water?
56. The use of foam chemicals?
57. The use of light water/purple K chemicals?
58. The use of all purpose fire nozzle?
59. The use of 4, 10, 12 foot applicators?
60. The use of eductors?
61. The effects of detergents and other cleaning agents on water and as a water pollutant?
62. The dangers to health from use of polluted materials?
63. A gun crew member's functions?
64. The damage control reporting procedures?
65. Watertight integrity symbol meanings?
66. The phonetic alphabet?
67. The contents of OPNAVINST 5510 series--Security Manual for Classified Information?

YEOMAN KNOWLEDGE ITEMS

In performing your job, are you required to know:

68. Proper English grammar and punctuation?
69. The Navy filing system?
70. The meaning of digit system used in Officer designators?
71. Officer and Enlisted pay grades?
72. Rank and rating abbreviations?
73. The location of Naval District Headquarters?
74. The general geographic areas of Naval Districts?
75. The Officer receipt and detachment procedures?
76. The general content and arrangement of Enlisted Service Records?
77. The procedures for control of registered mail?
78. The Uniform Code of Military Justice?
79. Regulations concerning leave?
80. Regulations concerning travel?
81. Regulations concerning non-judicial punishment?

- 82. Regulations concerning types of Court Martial?
- 83. Regulations concerning pretrial and court procedures?
- 84. Regulations concerning disposition of records and proceedings of Courts Martial?
- 85. Regulations concerning JUMPS (Joint Unified Military Payment System)?

Turn to Part D, Page 195.

PART D - EQUIPMENT, TOOLS, AND PUBLICATIONS

(Spaces for your responses are provided on Form D of Response Packet.)

Special Instructions

Below is a list of equipment, tools, and publications associated with your job. On Form D in the Response Packet are four choices corresponding to this list: "Not Used," "Operate/Use," "Maintain," and "Both." If an item is not used, leave all choices blank. Otherwise, blacken the space opposite the action you take of these four choices. Mark only one choice. (If you operate/use and maintain, then mark only "Both.")

When you have completed this part, go to the Special Instructions for Part E1 of this booklet.

COMMON SEAMAN EQUIPMENT

1. Accounting Machine (EAM)
2. Adding Machine
3. Addressograph
4. Alidade (telescopic)
5. Anchor buoy
6. Anemometer
7. Antenna Couplers
8. Antenna Tuners
9. Banding Machine, Metal Strap
10. Barometer
11. Bathythermograph
12. Battery Charger/Tester
13. Binoculars
14. Blocks (diamond, oval, roller bearing)
15. Blueprints
16. Breakable Spool, Quick-release Coupling
17. Calculator
18. Capstan
19. Cargo Nets
20. Case Hooks, Cargo
21. Cash Register
22. Chain Hoist

23. Chain Stopper
24. Chronometer
25. Collator, Card
26. Combined Quick-release Coupling and Valve (Robb)
27. Copying Machine (Xerox, Thermofax)
28. Crane
29. Dead Reckoning Tracer (DRT)
30. Demagnetizing Device
31. Detachable Chain Links
32. Digital/Differential Voltmeter
33. Diving Equipment
34. Duplicating Equipment (Ditto, Mimeograph)
35. Echo Box
36. Engine Order Telegraph
37. Engine Revolution Indicator
38. Exploder Cavity Tester
39. Extractor, Laundry
40. Fathometer
41. Fireplugs
42. Frequency Counter
43. Frequency Standard
44. Grapnel
45. Guages, Portable Pressure
46. Hand Guns
47. Hoisting Straps
48. Horizontal Conveyer
49. Interpreter, Card
50. Jacks (Hydraulic, Screw)
51. Keypunch, Card
52. Labeling Machine, Hand
53. Line Throwing Gun, 45/70
54. Long Glass
55. Maneuvering Board
56. Megger

57. Metal Embossing Machine
58. Microfilm Camera
59. Microfilm Viewer/Reader
60. Multimeter
61. Numbered Torpedo Tools
62. Oscilloscopes
63. Pallet Truck, High or Low Lift
64. Pallets, Sled or Box
65. Paper Shredder/Pulverizer
66. Pelican Hook
67. Pelorus or "dumb compass"
68. Pie Plate, Cargo
69. Portable AC/DC Power Supplies
70. Portable Blower "Red Devil"
71. Portable Water Pumps (P60, P250, P500)
72. Pressing Machine, Clothing
73. Protractor (Drafting Machine)
74. Psychrometer (Wet Bulb)
75. Quick Cleaning Strainer, Fire Station
76. Radar Repeater
77. Receiver, Communications
78. Recorders (Tape, Disc, etc.)
79. Rifle, Machine Gun
80. Rudder, Angle Indicator
81. Safe, Combination
82. Schematic Diagrams
83. Searchlight
84. Semaphore Flags
85. Sewing Machine
86. Sextant
87. Shackle Tool Kit
88. Shackles
89. Ship's Announcing System (1-MC)
90. Signal Generator
91. Slings (Choker, Chain, etc.)

92. Sonar Test Set
93. Sorter, Card
94. Spectrum Analyzer
95. Stadimeter
96. Staple Gun
97. Stencil Cutting Machine
98. Stop Watch
99. Synchro Tester
100. Telescope, Ship's
101. Telephone Hand Set
102. Teletype and Associated Equipment
103. Teletype Distortion Analyzer
104. Thermometer
105. Torpedo Handling Equipment
106. Transceiver, Portable
107. Transceiver, Mounted
108. Transistor Tester
109. Transmitter, Communications
110. Tube Tester
111. Turn Buckles
112. UHF/VHF Antenna
113. Ultrasonic Cleaner
114. Vacuum Cleaner
115. VAND (Sonar)
116. Verifier (Card Punch)
117. Verticle Tray Lift Conveyer
118. Very Pistol
119. Washing Machine
120. Wheel Angle Indicator
121. Winch

COMMON SAFETY EQUIPMENT

- 122. Asbestos Suit
- 123. Explosimeter
- 124. Face Shield
- 125. Flame Safety Lamp
- 126. Goggles
- 127. Hose or Airline Mask
- 128. Life Jacket
- 129. Magazine Sprinkler System
- 130. Noise Antennuators
- 131. Oxygen Breathing Apparatus (OBA)
- 132. Radiac Meter
- 133. Respirator
- 134. Safety Belt/Harness
- 135. Gas Mask Mark V

COMMON TOOLS

- 136. Allen Wrenches
- 137. Axe
- 138. Blow Torch
- 139. Bolt Cutters
- 140. Brace and Bit
- 141. Calipers
- 142. Chain Hooks
- 143. Chassis Punches
- 144. Chipping and Scaling Hand Tools
- 145. Crimping Tool
- 146. Dividers
- 147. Drawing Compass
- 148. Dummy Antenna
- 149. Electric Eraser
- 150. Electric Hand Tools

- 151. Feeler Gauges
- 152. Fid, wooden
- 153. File
- 154. Fire Axe
- 155. Flaring Tools
- 156. Fuze Puller
- 157. Grease Gun (hand)
- 158. Grinder
- 159. Grommet - inserting punch and dies
- 160. Hacksaw
- 161. Hand Drill
- 162. Hand Hammers
- 163. Hand Pop Rivet Gun
- 164. Hot Pot
- 165. Knife (hand)
- 166. Lapping Tools
- 167. Levels
- 168. Mallet
- 169. Marlinspike
- 170. Maul
- 171. Micrometer
- 172. Paint Brushes
- 173. Paint Sprayers
- 174. Paint Rollers
- 175. Parallel Rulers
- 176. Pipe Wrench
- 177. Plane, Wood
- 178. Pliers
- 179. Pneumatic Hand Tools
- 180. Pricker (Spike)
- 181. Pry Bar
- 182. Punches
- 183. Refacing/Reseating Tools
- 184. Ruler

- 185. Sandpaper
- 186. Scissors
- 187. Screwdrivers
- 188. Serving Mallet
- 189. Sewing Hand Tools (Sail Needles, Palm, etc.)
- 190. Sharpening Stones
- 191. Shorting Bar
- 192. Shears (Metal)
- 193. Soldering Equipment
- 194. Square
- 195. Tap and Die Set
- 196. Tape Measure Metal or Cloth
- 197. Torque Wrench
- 198. Trowels
- 199. Tube Bending Equipment
- 200. Tubing Cutter
- 201. Vise
- 202. Wire Cutters
- 203. Wood Saw
- 204. Wire Rope Clips
- 205. Wrenches (Box, Open, Adjustable, Socket)

COMMON PUBLICATIONS

- 206. ACP--Allied Communications Procedures
- 207. Afloat Consumption, Cost and Effectiveness Surveillance System
- 208. Afloat OPTAR (Operating Target) Record Keeper's Guide
- 209. Afloat Supply Procedures
- 210. Allied Naval Signal Book
- 211. APL--Allowance Parts List
- 212. ATP--Allied Tactical Publications
- 213. Armed Forces Receipt Service
- 214. Armed Services Procurement Regulations
- 215. Bibliography for Advancement Study

- 216. Bureau of Naval Personnel Manual
- 217. Catalog of Aeronautical Charts and Related Publications
- 218. Catalog of Nautical Charts and Publications
- 219. Clothing Price List
- 220. COSAL (Coordinated Shipboard Allowance List) Manuals and Publications
- 221. CSPM (Communications Security Publication Memorandum)
- 222. Disposal of Navy and Marine Corps Records Manual
- 223. Disaster Control (Ashore and Afloat) NAVPERS 10899
- 224. DNC (Directions for Naval Communications)--U. S. Navy Communications Procedures
- 225. Education Services Manual
- 226. Enlisted Transfer Manual
- 227. Federal Supply Catalogs
- 228. Federal Supply Classification System
- 229. Financial Management Handbook for Permanent Change of Station (PCS) Travel
- 230. Food Service Operation and Management Manuals
- 231. Hydrographic Office Publications (HOs)
- 232. Illustrated Shipboard Shopping Guide
- 233. Instructions for Keeping Ship's Deck Log
- 234. JAG (Judge Advocate General Manual)
- 235. JANAP (Joint Army, Navy, Air Force Procedures)
- 236. Jane's Fighting Ships
- 237. Joint Travel Regulations
- 238. JUMPS (Joint Uniform Military Pay System) Allotment Handbook
- 239. List of Training Manuals and Correspondence Courses
- 240. Maintenance and Material Management (3M) Manual
- 241. Maneuvering Board Manual
- 242. Manpower and Personnel Management Information System Manual
- 243. Manual for Courts Martial
- 244. Manual for Ships Surface Weather Observation
- 245. Manual of Naval Preventive Medicine
- 246. Manual of Navy Enlisted Classifications
- 247. Manual of Navy Officer Classifications
- 248. Manual of Qualifications for Advancement
- 249. Manufacture's Instruction Books

250. MDCS (Maintenance Data Collection System) Manual
251. Military Pay and Allowances Manuals
252. Military Standard Marking for Shipment and Storage
253. MILSTAMP (Military Standard Transportation and Improvement Procedures)
254. MILSTRIP (Military Standard Requisitioning and Issuing Procedures)
255. National Zip Code Directory
256. Nautical and Air Almanacs
257. Nautical Chart Symbols and Abbreviations
258. Naval Ships Technical Manuals
259. Navy and Marine Corps Award Manual
260. Navy Comptroller Manuals
261. Navy Correspondence Manual
262. Navy Instructions and Notices
263. Navy Management Data List
264. Navy Standard Subject Identification Codes
265. Navy Stock List of Publications and Forms
266. Navy Supply Systems Command Manuals
267. Notice to Mariners
268. NWIP (Naval Warfare Information Publications)
269. NWP--(Naval Warfare Publications)
270. Official Airlines, Railway, and Bus Guide
271. Official Table of Distances
272. PMS (Preventive Maintenance System) Manual
273. PQS (Personnel Qualification Standards) Manual
274. Portfolio Chart List
275. Processing Procedures for Supply and Financial Management of Combat Store Ships
276. Radiation Manual
277. Register of Commissioned and Warrant Officers of the U. S. Navy and Marine Corps
278. Registered Publications Manual
279. Safety Precautions Manual
280. Shipboard Uniform Automated Data Processing Support Procedure Manual

- 281. Ship's Store Afloat Catalogs and Manuals
- 282. Standard Highway Mileage Guide
- 283. Standard Navy Distribution List
- 284. Storage and Materials Handling
- 285. Submarine Recognition Manual
- 286. Supply Afloat Packaging Procedures
- 287. Supply Operations Assistance Program Manual
- 288. The Road Atlas
- 289. Tide and Current Tables
- 290. USAFI (United States Armed Forces Institute) Catalog
- 291. U. S. Navy Regulations and General Orders
- 292. U. S. Navy Travel Instructions
- 293. U. S. Navy Uniform Regulations
- 294. U-1500 Computer Systems Procedure for Supply and Financial
Management of Tenders and Repair Ships

Turn to Part E, Page 205.

PART E1 - PHYSICAL HAZARDS OF YOUR JOB

(Spaces for your responses are provided on Form E of Response Packet.)

Special Instructions

Below is a list of physical hazards associated with your job. On Form E, Section E-1 in the Response Packet are three choices corresponding to the extent these hazards affect your job performance: "None," "Occasionally," and "Frequently." If your selection is "None," leave all three choices blank. Otherwise, blacken the space opposite the action you take of "Occasionally" or "Frequently." Mark only one choice for each numbered item.

1. Electrical
2. Excessive noise level
3. Excessive temperatures
4. Excessive vibration
5. Eye damage due to flash and/or particles
6. Gas, smoke, or fumes
7. High elevation (Loss of equilibrium)
8. Machinery in motion
9. Nuclear radiation
10. Skin irritants (caustics, acids, etc.)
11. Slippery walkways
12. Steam, fluid or air pressure

When you have completed this part, go to the next page for Special Instructions for Part E2 of this booklet.

PART E2 - WORKER CHARACTERISTICS OF YOUR JOB

(Spaces for your responses are provided on Form E of the Response Packet.)

Special Instructions

Below is a list of worker characteristics associated with your job. On Form E, section E-2 in the Response Packet are three choices corresponding to the extent these characteristics apply during your job performance: "Below Average," "Average," and "Above Average." If an item is not applicable, leave it blank. Otherwise, blacken the appropriate space of your selection.

Worker Characteristics

1. Finger, hand, wrist, and forearm strength
2. Upper arm strength
3. Back and shoulder strength
4. Leg, foot and ankle strength
5. Rapid work for a series of short periods
6. Rapid work for extended periods
7. Rapid work for indefinite periods
8. Heavy work for extended periods
9. Heavy work for a series of short periods
10. Heavy work for indefinite periods
11. Finger dexterity
12. Hand and arm dexterity
13. Foot and leg dexterity
14. Eye-hand coordination
15. Foot-eye-hand coordination
16. Coordination of the independent movement of both hands
17. Foot-eye coordination
18. Foot-hand coordination
19. Height limitations
20. Weight limitations
21. Unpleasant working conditions
22. Hazardous working conditions
23. General visual acuity (sharpness of vision)
24. Color acuity (able to distinguish between colors)

25. Size estimation
26. Quality estimation
27. Speed estimation
28. Quantity estimation
29. Form perception
30. General keenness of hearing
31. Sense of smell
32. Touch discrimination ("feel" of objects)
33. Muscular discrimination estimating weights by lifting, pulling
34. Sense of taste
35. Memory for concrete details
36. Memory for ideas, theories, plans, processes, policies
37. Memory for oral directions
38. Memory for written directions
39. Memory for names and persons
40. Arithmetic computation
41. Planning ability
42. Mechanical ability
43. Oral expression
44. Written expression
45. Attention to many items at one time
46. Adaptability - (ability to accept change)
47. Decision making ability
48. Initiative - (ability to proceed on your own)
49. Tact - (ability to discuss items without offending)
50. Personal appearance
51. Concentration amid distractions
52. Emotional stability
53. Dealing with the public
54. Teamwork
55. Leadership
56. Dependability

When you have completed this part, go to the next page for Special Instructions for Part E3 of this booklet.

PART E3 - WATCH STANDING DUTIES OF YOUR JOB

(Spaces for your responses are provided on Form E of Response Packet.)

Special Instructions

Below is a list of watch standing duties associated with your job. On Form E, section E3, in the Response Packet are two parts with three choices each, corresponding to this watch list. The three choices of the first part are: "In Port," "Underway," and "Both." The three choices of the second part are: "0-8 hours," "8-16 hours," and "Over 16 hours." If any item is not applicable, leave that item blank. Otherwise, blacken the spaces of your selection in both parts. Blacken only one space in each part.

WATCHES

1. After Steering Watch
2. Atmosphere Control Watch (Smoke)
3. Boat Crew (Coxswain, Bow or Stern Hook)
4. Boatswain's Mate of the Watch
5. Burner Watch
6. Check Watch
7. Damage Control Central Watch
8. Duty Driver
9. Duty Movie Projector Operator
10. Emergency Diesel Watch
11. Engine Room Lower Level Watch
12. Engine Room Upper Level Watch
13. Engine Room Throttle Watch
14. Evaporator Watch
15. Feedwater Control Station Watch
16. Fire Watch
17. Gyro-Compass Watch
18. Lee Steersman (Lee Helmsman)
19. Lookout (Bow, Stern, Bridge, etc.)
20. Main Ship Service Switch Board Watch

21. Messenger of the Watch (Quarterdeck, Engineering, Bridge,
DC Central, etc.)
22. Petty Officer of the Watch
23. Police Petty Officer
24. Quartermaster of the Watch (Inport/Underway)
25. Section Leader
26. Sentry (Pier, Bow, Fantail, etc.)
27. Signal Watch (Inport/Underway)
28. Small Boat Engineer
29. Steersman (Helmsman)
30. Sounding and Security Watch
31. Telephone Switchboard Operator
32. Towing Watch
33. Weapons Security Watch

When you have completed this part, go to the next page for Special Instructions for Part E4 of this booklet.

PART E4 - JOB FACTORS

(Spaces for your responses are provided on Form E of Response Packet.)

Special Instructions

Below is a list of job factors which have a bearing on the job you do. On Form E, section E4 in the Response Packet are five choices corresponding to your degree of satisfaction with the job factors: "Very Dissatisfied," "Dissatisfied," "No Opinion," "Satisfied," and "Very Satisfied." If any job factor has no bearing on your job performance, leave that item blank. Otherwise, blacken one of the spaces as appropriate.

JOB FACTORS

1. Opportunity for achievement
2. Job appeal
3. Training for the job
4. Resources to do job
5. Recognition for work done
6. Responsibility and independence in carrying out job
7. Freedom from restrictive rules and regulations
8. Opportunity for promotion
9. Job pressures
10. Competence of seniors
11. Adequacy of living conditions
12. Competence of subordinates
13. Guidance from supervisor
14. Chance to do primary job
15. Adequacy of relations with superior
16. Adequacy of work surroundings and atmosphere
17. Pay and allowances
18. Opportunity for growing and developing
19. Adequate operation of the military system
20. Status within the organization
21. Opportunity to see work results
22. Opportunity to have pride for the service
23. Opportunity for proving self
24. Acceptance of recommendations

25. Frequency of job changes
26. Worthwhileness of work
27. Opportunity to contribute
28. Job challenge
29. Opportunity to do entire job
30. Fair treatment by the system
31. Proper utilization of money and/or resources
32. Opportunity for helping others
33. Adequacy of relations with subordinates
34. Present job
35. Overall military career

The last sheet of the Response Packet is blank so that you can make comments that are not provided for in the booklet. When you have completed the comment sheet, turn in all materials used to persons administering the survey.

Reminder: Make sure your Social Security number is written on every page of the Response Packet in the space provided.

This completes our survey.

APPENDIX C

JOB DESCRIPTION INDEX (RESPONSE PACKET)

This index provides spaces for responding to items in the Work Requirements Survey (Appendix B) for all 18 SN Apprenticeship rates and seven FN Apprenticeship rates.

The Job Description Index is divided into five parts, or forms. Forms A, C, D, and E are the same for all ratings, but Form B sheets (Task Inventory) can be assembled to accomodate any number of rating tasks, resulting in savings in format design.

(REVERSE SIDE BLANK)

**JOB DESCRIPTION INDEX
BACKGROUND INFORMATION SHEET**

FORM "A"

ACTIVITY NAME: _____

MAN'S NAME: _____

RATE: _____

DATE: _____

| 1) SHIP OR STATION ACTIVITY CODE | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |

| 2) SOCIAL SECURITY ACCOUNT NUMBER | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |

| 3) TEST SCORES | | | | |
|----------------|-----|------|------|------|
| GCT | ARI | Mech | Clar | Shop |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 |

| 4) Rating you are presently working in |
|--|
| 0 |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |

| 5) YOUR PRESENT | |
|-----------------|-----------|
| Rating | Pay Grade |
| 0 | E |
| 1 | E 1 |
| 2 | E 2 |
| 3 | E 3 |
| 4 | E 4 |
| 5 | E 5 |
| 6 | E 6 |
| 7 | E 7 |
| 8 | E 8 |
| 9 | E 9 |

| 8) FORMAL EDUCATION | |
|------------------------|------------------------|
| Years | Degrees or Diplomas |
| 0 | Nona |
| 1 | A |
| 2 | High School |
| 3 | B |
| 4 | Associate Degree |
| 5 | C |
| 6 | Bachelor's Degree |
| 7 | D |
| 8 | Master's Degree |
| 9 | E |

| 7) Total Active Navy Service | |
|---------------------------------|--------|
| Years | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 8) Time At Present Activity | |
|-----------------------------------|--------|
| Years | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 9) Time in Present Rating | |
|---------------------------------|--------|
| Years | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 10) Time in Present Pay Grade | |
|-------------------------------------|--------|
| Years | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

BEGIN RATING IN FIRST COLUMN

BEGIN RATING IN FIRST COLUMN

| SEX |
|-----|
| M F |
| C M |

| 11) Time on mess- men duty | |
|----------------------------------|--------|
| Weeks | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 12) Time on Com- partment Cleaning | |
|---|--------|
| Weeks | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 13) Time Assigned to present job (billet) | |
|--|--------|
| Years | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 14) You were Designated through | |
|---|---|
| Class "A" School | A |
| Exam. Center Design- ation (PNA) | B |
| Other | C |

| 15) Time you have worked in designated specialty? | |
|--|-------|
| Months | Years |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 16) Did you have any technical training before entering the service that you now use in your current job? | |
|--|---|
| No | 0 |
| 1-3 mo. | 1 |
| 4-6 mo. | 2 |
| 6-12 mo. | 3 |
| Over 1 year | 4 |

| 17) Number of times you have taken the advancement exam for: | |
|---|---|
| None | 0 |
| One | 1 |
| Two | 2 |
| Three | 3 |
| Four or more | 4 |

| 18) No. of weeks after "A" school before assignment to rating specialty? | |
|--|--------|
| Weeks | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 19) No. of weeks onboard before assignment to a permanent job? | |
|--|--------|
| Weeks | Months |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 20) No. of divisions you have worked in at this activity? | |
|--|---|
| One | 1 |
| Two | 2 |
| Three | 3 |
| Four or more | 4 |

| 21) No. of E2/E3 you directly supervise. | |
|---|---|
| None | 0 |
| 1-4 | 1 |
| 5-6 | 2 |
| 9-12 | 3 |
| 13-16 | 4 |
| 17-20 | 5 |
| 21-24 | 6 |
| 25-28 | 7 |
| 29-35 | 8 |
| Over 35 | 9 |

| 22) Total number of months you have been in supervisory billet in your naval career. | |
|---|-------|
| Months | Years |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

| 23) Naval Category | |
|------------------------------------|---|
| USN | A |
| USNR | B |
| TAR | C |
| 24) Do you Plan To Re-enlist | |
| Yes | A |
| No | B |
| Uncertain | C |

NCS Trans-Optic F1585-54321

FORM "B"

NCS Trans-Optic F1586-54321

JOB DESCRIPTION INDEX

FORM "C"

| KNOWLEDGE FACTORS | | | | | | | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ITEM NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| No | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| ITEM NO. | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| ITEM NO. | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No | | | | | | | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| ITEM NO. | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No | | | | | | | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| ITEM NO. | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No | | | | | | | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| ITEM NO. | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No | | | | | | | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| ITEM NO. | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No | | | | | | | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| ITEM NO. | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No | | | | | | | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| ITEM NO. | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No | | | | | | | | | | | | | | | | | | | | |
| Yes | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| SOCIAL SECURITY ACCOUNT NUMBER | | | | | | | | | | S | P |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | E | A |
| | | | | | | | | | | C | G |
| | | | | | | | | | | T | E |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | B | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | C | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | D | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | E | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | F | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | G | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | H | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | I | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | J | 9 |

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JOB DESCRIPTION INDEX

FORM "D"

| TOOL, EQUIPMENT & PUBLICATION RESPONSE SHEET | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ITEM NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Not Used | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operate/Use | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) |
| Maintain | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) |
| Both | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) |

| SOCIAL SECURITY ACCOUNT NUMBER | | | | | | | | | | Page |
|--------------------------------|---|---|---|---|---|---|---|---|---|------|
| | | | | | | | | | | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 10 |

| ITEM NO. | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Not Used | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operate/Use | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | |
| Maintain | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | |
| Both | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |

| ITEM NO. | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Not Used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operate/Use | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | |
| Maintain | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | | |
| Both | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |

| ITEM NO. | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Not Used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operate/Use | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | |
| Maintain | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | |
| Both | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |

| ITEM NO. | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Not Used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operate/Use | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | |
| Maintain | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | |
| Both | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |

| ITEM NO. | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Not Used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operate/Use | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | |
| Maintain | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | |
| Both | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |

| ITEM NO. | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Not Used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operate/Use | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | |
| Maintain | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | |
| Both | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |

| ITEM NO. | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Not Used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operate/Use | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) | |
| Maintain | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | (C) | |
| Both | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |

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FORM "E"

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Commander Cruiser-Destroyer Force, Pacific Fleet
Commander Naval Air Force, Atlantic Fleet
Commander Naval Air Force, Pacific Fleet
Commander Service Force, Atlantic Fleet
Commander Training Command, Atlantic Fleet
Commander Training Command, Pacific Fleet
Commander Service Group One
Commander Submarine Flotilla One
Commander in Chief, Atlantic Fleet
Commander in Chief, Pacific Fleet
Commanding Officer, Service School Command, Naval Training Center,
Great Lakes
Commanding Officer, Recruit Training Command, Naval Training Center,
Great Lakes
Commanding Officer, Recruit Training Command, Naval Training Center,
Orlando
Commanding Officer, Recruit Training Command, Naval Training Center,
San Diego
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APPENDIX A

APPENDIX B

PERSONAL INFORMATION

BOATSWAIN'S MATE (BM)

COMMISSARYMAN (CS)

DISBURSING CLERK (DK)

DATA PROCESSING TECHNICIAN (DP)

ELECTRONICS TECHNICIAN (ET)

FIRE CONTROL TECHNICIAN (FT)

GUNNER'S MATE (GM)

OPERATIONS SPECIALIST (OS)

PERSONNELMAN (PN)

QUARTERMASTER (QM)

RADIOMAN (RM)

STEWARD (SD)

SHIP'S SERVICEMAN (SH)

STOREKEEPER (SK)

SIGNALMAN (SM)

SONAR TECHNICIAN (ST)

TORPEDOMAN'S MATE (TM)

YEOMAN (YN)

EQUIPMENT, TOOLS, AND PUBLICATIONS

PHYSICAL HAZARDS OF YOUR JOB

APPENDIX C